LIBRARY

Brigham Young University

Call 781.3
No. J17

LT

7-23-

Edw P Kimball
'09

CLAYTON-DAYNES
MUSIC CO
109-111-113 MAIN STREET,
SALT LAKE CITY,

MT
50
.J23

McCUNE SCHOOL OF MUSIC & ART

A MANUAL OF HARMONY

70

BY

S. JADASSOHN

TEACHER IN THE ROYAL CONSERVATORY OF MUSIC AT LEIPSIC.

Translated from the Third Augmented and Carefully Revised
German Edition

BY

Dr. Th. Baker.

NEW YORK:
G. SCHIRMER,
1907

BRIGHAM YOUNG UNIVERSITY
LIBRARY
PROVO, UTAH

Copyright, 1893, by G. SCHIRMER.

10979.

PREFACE TO THE FIRST EDITION.

YIELDING to oft-repeated and urgent requests for the publication of the method according to which I have for years given instruction in the Theory of Music, I have decided to publish the fruits of my private study and experience in teaching, in the form of three instruction-books. The first of these will be entitled "A Manual of Harmony," to be followed as soon as possible by a second on "Single and Double Counterpoint," and a third on "Canon and Fugue."

An attempt to give an idea of the new features which I have introduced, both as regards the elucidation of the chords and their combinations, and the plan of instruction, would take too long; the matter is fully set forth in the following pages. But I will not neglect to call attention to the additional examples given in the Appendix, which are worked out conformably to rules found in the corresponding chapters. I have learned from practical experience in teaching that it does not suffice, in many cases, to show the pupil how the rules are applied in isolated instances, i.e. out of all connection with some piece of music, however small, which forms an organic whole. Almost any pupil can learn a rule more easily and thoroughly when its application is clearly illustrated in the compact form of one or more little pieces of music. The manifold and peculiar difficulties besetting instruction in musical theory render this method almost indispensable. We derive what we call our rules from the works of the classic masters; but at the same time we find so great a number of exceptions to the rules, that the latter often seem doubtful to the pupil. Take one instance: The pupil learns at first that the seventh in a chord of the seventh must resolve by a step downward. Presently he discovers that in very many cases it may also progress upward by a step, or be held, or enharmonically changed, or even led down by a skip to tones belonging to other chords. Thus nothing is left him of the rule first laid down but the principle that the seventh is to be led downward by a step, when the following chord and the correct leading of the parts permit of so doing. Now, if one were to show the pupil examples from classic masters, whenever one of the above-mentioned numerous exceptions turned up — providing that the necessary material was always at hand — he would hardly be able at first to judge of and understand such examples taken from large compositions, and might possibly be inclined to regard them as liberties permitted to genius, whereas these liberties take their rise, exactly like the rule, in the nature of the case. It is therefore better to show the pupil the application of and the exceptions to the rule by means of examples specially constructed for the purpose; although such little pieces, written merely to teach certain points, possess neither the value nor the charm of artistic compositions.

Though I have termed the present first part of my work, conformably to general usage, a "Manual of Harmony," the words "harmony" and "harmonic" are not used in the body of the book; the terms "chord" and "chordal" being substituted for them throughout. This step, too, was dictated by experience in teaching. Before the pupil enters on the study of theory, he has become familiarized with the term "chord" from the beginning of his practical study, whether instrumental or vocal. Everyone knows what this word means in music. The term "harmony" is mostly known in a sense different from that in which it is used in the earlier instruction-books. The pupil finds it strange that *dissonant chords*, such as the augmented and diminished triads and all chords of the seventh, are also called "harmonies." He finds it strange, moreover, that the term "harmony" is employed only for chords in the fundamental position, and that their inversions are always called chords and not harmonies, whereas both terms are applied in just the same sense to the fundamental position of the chords. The expressions "chord of the sixth," "chord of the fourth and sixth," "chord of the fifth and sixth, of the third and fourth, of the second," are all used as technical terms.

Here we need not discuss whether and to what extent the terms "harmony" and "chord" are interchangeable; my sole object has been to make my text-book as simple, clear, and intelligible as might be to the pupil, without superfluous verbiage, and without regard to elegance of diction. Then why use two terms, one of which can be employed only with restrictions, and is strange and indefinite to the beginner, while the other, which he knows from the outset, suffices in every case?

And now one word to the pupil. Whoever wishes to get real benefit from this book, must not be satisfied with merely learning and understanding the principles and rules given in it. He must also learn to apply them practically with the freedom of an artist. For this reason I have provided the book with a very large number of exercises for practice, advancing in each individual case from simple, easy tasks to more complicated and difficult ones. Let no one be content with working out *only a part* of these exercises; each of them is so arranged, that the pupil learns the application of a rule in as many and various forms as possible. A thorough and complete knowledge of the chords and their inter-combination, such as the artist needs not only for original free composition, but also for preluding and modulating, and for a correct and intelligent rendition of master-works, can be attained solely by means of earnest, diligent, and persevering work. Nor should the pupil be content to treat the exercises for practice as dry school-exercises, and to work them out merely from this point of view; for even in them a talented student will find opportunity to display the qualities of an artist, such as taste and refinement, a striving after euphony, and a good leading of the melody. It will therefore often be well to work over one and the same exercise several times and in different positions, even in cases where a given pitch appears most convenient and suitable. In this way alone can the pupil attain to a sure and perfect mastery over the technicalities in the inter-connection of chords, which form the groundwork of the studies in counterpoint and of all work in composition.

S. JADASSOHN.

Leipsic, July, 1883.

PREFACE TO THE SECOND EDITION.

The second edition of the "Manual of Harmony" has been carefully revised, and augmented by explanatory notes and hints for working out the exercises contained in the book. These explanations have been added in the shape of a second Appendix of sixteen pages; they will essentially facilitate the teacher's task, and be a welcome aid to the pupil when at work; and will prove, more especially, an efficient help to and a reliable guide for the self-taught.

S. JADASSOHN.

Leipsic, March, 1887.

TABLE OF CONTENTS.

Chapter I, pp. 1 – 9.

§1. Natural and derivative tones. §2. Intervals; diatonic major scale. §3. Greater and lesser semitones. §4. Exacter definition of the intervals. §5. Measurement of the intervals upward. §6. View of the intervals. §7. Modes. Enharmonico-chromatic scale. §8. Perfect and imperfect consonances; dissonances.

Chapter II, pp. 9 – 12.

§9. Intervals both above and below (inverted).

Chapter III, pp. 12 – 24.

§10. Classification of the chords as triads and chords of the seventh, independent and dependent chords. §11. Major and minor triads: fundamental triads in major. §12. Interconnection of the fundamental triads in four-part writing; compass of the voices in the chorus. §13. Exhibition of the triads in the four-part vocal chorus. §14. Common tones in two chords. §15. Progressions between the triads on the 4th and 5th degrees. Parallel octaves and fifths. §16. The three styles of motion. §17. Exercises, close and open harmony. §18. Forms of the close.

Chapter IV, pp. 24 – 35.

§19. Subordinate triads in major. Dissonant, diminished triad. §20. Progressions between all triads in major. §21. Covered parallel octaves in the outer parts. §22. Connection of two neighboring triads by contrary motion. §23. The leading-note. §24. Examples. Exercises. §25. Sequences.

Chapter V, pp. 35 – 45.

§26. The minor scale, and its triads. §27. Dual form of the minor scale. Augmented triad. §28. Step of the augmented second. §29. Connection of the triads on the 5th and 6th degrees in minor. §30. Thorough-bass notation. §31. Examples. Exercises. View of all triads in major and minor.

Chapter VI, pp. 45 – 58.

§32. The inversions of the triad. §33. Successions of two or more chords of the sixth. §34. Chord of the fourth and sixth. Examples. Exercises.

Chapter VII, pp. 59 – 70.

§35. Chords of the seventh. Dominant chord of the seventh. §36. Natural resolution of dominant chord of the seventh. Covered parallel fifths. §37. Perfect cadence. Examples. Exercises.

CHAPTER VIII, pp. 70 – 77.

§38. The inversions of the dominant chord of the seventh, and their natural resolutions. Examples. Exercises.

CHAPTER IX, pp. 77 – 86.

§39 The secondary chords of the seventh in major, and their natural resolutions. The tritone. §40. Preparation of the seventh. Exercises.

CHAPTER X, pp. 86 – 89.

§41. Interconnection of the secondary chords of the seventh in major, in the fundamental position; their inversions and progressions. Exercises.

CHAPTER XI, pp. 86 – 98.

§42. Secondary chords of the seventh in minor, and their inversions. §43. Diminished chord of the seventh, and its natural resolution. Exercises.

CHAPTER XII, pp. 98 – 108.

§44. Non-cadenced progressions between the chords of the seventh on other degrees and in other keys. Deceptive cadences. Modulation. Freer leading of the seventh. §45. Necessary leading of the seventh upward. Exercises.

CHAPTER XIII, pp. 108 – 117.

§46. Progressions between the secondary chords of the seventh and chords on other degrees and in other keys. Permissible succession of a perfect and an augmented fifth. §47. Free entrance of seventh and root in contrary motion. Exercises.

CHAPTER XIV, pp. 118 – 128.

§48. Altered chords. Triads with altered fifth. Exercises. §49. Chords of the seventh with altered fifth. Open harmony. The old clefs. Examples. Exercises.

CHAPTER XV, pp. 128 – 144.

§50. Augmented chords of the sixth, of the third and fourth, and third, fifth and sixth, and their resolutions in major and minor. Augmented chord of the sixth belongs to two major and two minor keys. Exercises. §51. Indirect resolutions of the augmented chord of the fifth and sixth. Direct modulatory resolutions. Exercises. Leading of the parts by a skip. View of all chords.

CHAPTER XVI, pp. 143 – 164.

§52. On suspensions. §53. Entrance and resolution of suspensions. §54. Suspension in the bass. Thorough-bass notation of the suspension. Examples. Exercises.

CHAPTER XVII, pp. 164 – 175.

§55. Suspensions in several parts. Upward resolution. §56. Freer progression of chords in a suspension. On supposititious chords of the ninth, eleventh, and thirteenth. Exercises.

CHAPTER XVIII, pp. 175–182.

§57. Passing-notes and passing-chords. Changing-notes. The organ-point. §58. Organ-point on the tonic, on the dominant, and on tonic and dominant together. Examples. Exercises.

CHAPTER XIX, pp. 182–194.

§59. Covered parallel octaves and fifths; cross-relation. §60. Covered parallel fifths with a whole-tone step.

CHAPTER XX, pp. 194–208.

§61. Employment of the chords for accompanying a cantus firmus in four-part writing. Leading of the bass. Inner parts. Examples. Exercises. §62. The cantus firmus in alto or tenor. Melodic leading of the soprano. Examples. Exercises.

CHAPTER XXI, pp. 208–221.

§63. Modulation. Means of modulation. Dominant chord of the seventh. §64. Augmented chord of the third, fifth and sixth. The $^6_4$ chord on the strong beat. §65. The diminished chord of the seventh as a chief means of modulation. §66. The augmented chord of the sixth, and other means of modulation. More extended modulations.

CHAPTER XXII, pp. 221–233.

§67. Closing cadence. §68. Chromatic change of tones in the chord on the 2nd degree in the closing cadence. §69. Chord of the seventh on the 2nd degree as introducing the closing cadence. Triad and chord of the seventh on the 4th degree, with chromatic change of the several tones on beginning closing cadence. §70. Chromatic alteration of chord of the seventh on the 4th degree. Concluding remarks.

CHAPTER XXIII, pp. 234–240.

On the Musical Hearing.

CHAPTER XXIV, pp. 240–246.

Subject-matter and Form.

APPENDIX I, pp. 247–272.

Explanatory examples.

APPENDIX II, pp. 273–288.

INDEX, pp. 289–292.

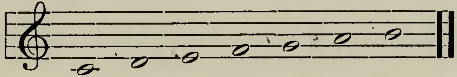
A MANUAL OF HARMONY.

PART THE FIRST.

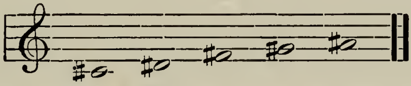
CHAPTER I.

The Intervals.

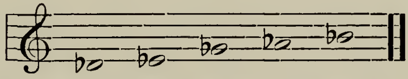
§ 1. The number of primary or natural tones employed as the building-material of music is limited to seven, from which we derive five further derivative tones. Taken in natural succession, the seven natural tones form the Diatonic Major Scale.

1.


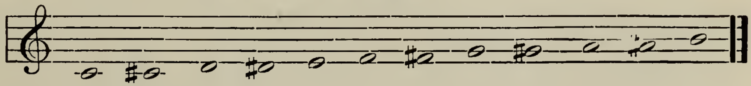
From these natural tones are derived, by means of raising the first, second, fourth, fifth, and sixth tones by a semitone each, the derivative tones

2.


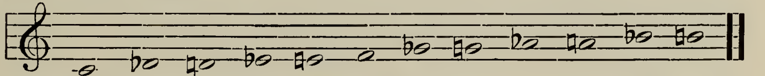
lying between the naturals. We can also get them by lowering the second, third, fifth, sixth, and seventh natural tones by a semitone each.

3.


All twelve tones may therefore be written in chromatic succession, either with the following signs:

4.


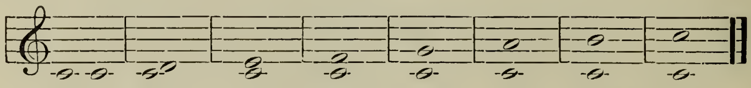
or with these others:

5.


We assume that the pupil already knows that tones can be enharmonically represented in still other ways, which we do not require for our present purpose.

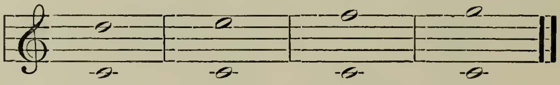
§2. The difference in pitch between two tones we term an Interval. Within the diatonic major scale, erecting the intervals in every case on the first or key-note (tonic), the second note will form the interval of a Second with the key-note; the third note that of a Third; the fourth note that of a Fourth; the fifth that of a Fifth; the sixth that of a Sixth; the seventh that of a Seventh; and the eighth, the interval of an Octave. The key-note itself we call a Prime.

6.



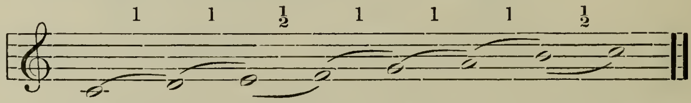
Advancing further, we get the Ninth, Tenth, Eleventh, and Twelfth, which are transpositions of the Second, Third, Fourth, and Fifth, respectively, into their higher octave.

7.



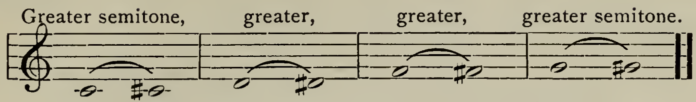
The prime, fourth, fifth, and octave of the major scale are termed *perfect* intervals; the second, third, sixth, and seventh being *major* ones. The distances between neighboring tones in the major scale are as follows: From the 1st degree (prime) to the 2nd, a whole tone; from the 2nd to the 3rd, likewise a whole tone; from the 3rd to the 4th, a semitone; from the 4th to the 5th, a whole tone; from the 5th to the 6th, and from the 6th to the 7th, a whole tone; and from the 7th to the 8th (octave), a semitone.

8.

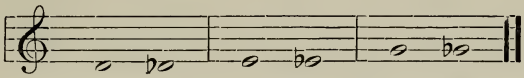


A whole tone is therefore an interval between two neighboring tones in the scale, between which one intermediate tone can be obtained by chromatically changing either of the said two tones. The narrowest interval between two tones is called a semitone (half-tone).

§3. We distinguish between *greater* semitones and *lesser* semitones. The *greater* semitone arises from the chromatic change brought about by a chromatic sign before a note. Thus from *c* to the nearest *c*♯, or from *g* to the *g*♯ next above it, is a *greater* semitone.

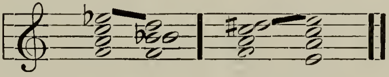
9. 

The interval from *d* to *d*♭, *e* to *e*♭, or *g* to *g*♭, is likewise a *greater* semitone.

10. 

The *lesser* semitone is found only between two neighboring degrees. Thus the interval from *c* to the *d*♭ next above it, from *c*♯ to the next *d*, from *d* to *e*♭; or, from *d*♯ to *e*, is a *lesser* semitone.

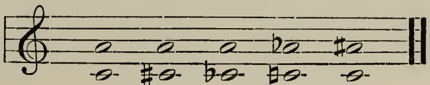
Remark. The falsity of the contrary opinion expressed by earlier text-books, that the change produced in a natural tone by a chromatic sign is the *lesser* semitone of the natural tone, and that the minor second is the *greater* semitone, will at once be revealed to the practical musician by the different resolutions of the like-sounding chords *f–a–c–e*♭ and *f–a–c–d*♯.



E♭ being the nearer to *D*, tends to *D*, and *D*♯ to *E*. Louis Lohse, in his essay "Contra the New Keyboard" (Musikalisches Wochenblatt, 1883, No. 2), expresses his views on this head with great clearness. He observes: "The opinion that *c–c*♯ is the lesser semitone, and *c–d*♭ the greater, is doubtless productive of serious mischief. The reverse is true. Assuming c^1 at 256 vibrations, an absolutely pure *d*♭ has 268.04, while a pure *c*♯ has 273.0375 vibrations. The minor second is therefore materially narrower than the augmented prime."

This observation furnishes an easy explanation of the natural progression of the leading-note, and also of the natural resolutions of all the altered chords and chords of the seventh.

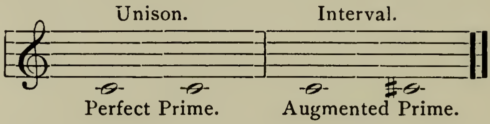
§4. The intervals lying within the major scale, which we named, as erected upon the key-note, the Second, Third, Fourth, Fifth, Sixth, Seventh, Octave, and Ninth, become essentially different intervals when either of the two tones forming each interval is raised or lowered a semitone by means of a chromatic sign. The sixth C – A, for instance, appears narrower or wider according as we change *c* into *c*♯ or *c*♭, or *a* into *a*♯ or *a*♭.

11. 

These changes in the tones of an interval by chromatically raising or lowering either or both of the tones, render necessary a preciser nomenclature of the intervals so obtained.

Measurement of the Intervals Upward.

§5. We named the intervals of the major scale either *perfect* or *major*. By raising the higher tone of any such interval by a *greater* chromatic semitone, the perfect or major interval so changed becomes an augmented interval. This also holds good of the Prime, which in itself is no interval, but a unison.



By lowering the higher tone of any major interval by a *greater* chromatic semitone, we change the major interval into a minor one.

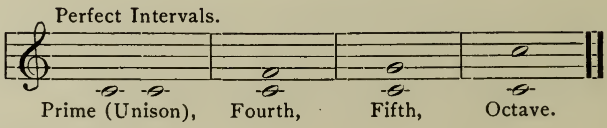
By raising the lower tone of any minor interval by a *greater* chromatic semitone, we get a diminished interval.

By raising the lower tone of a perfect fourth, fifth, or octave by a *greater* chromatic semitone, the perfect interval is changed to a diminished one.

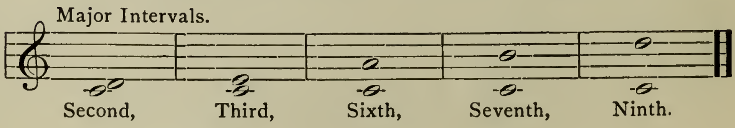
§6. We likewise get the diminished fourth and fifth by lowering the higher tone of a perfect fourth or fifth; the interval *c*–*g*♭ is thus exactly equivalent to *c*♯–*g*. Diminished primes and octaves do not occur in pure chords; neither are diminished seconds, augmented thirds, diminished sixths, augmented sevenths, and diminished ninths employed in building up chords.

View of the Intervals.

12.

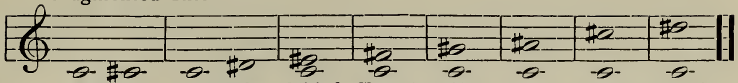


13.



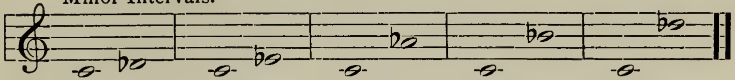
Augmented Intervals.

14.



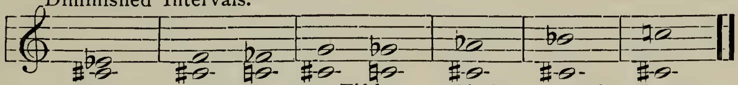
Minor Intervals.

15.

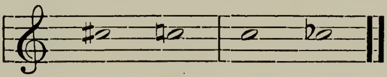


Diminished Intervals.

16.

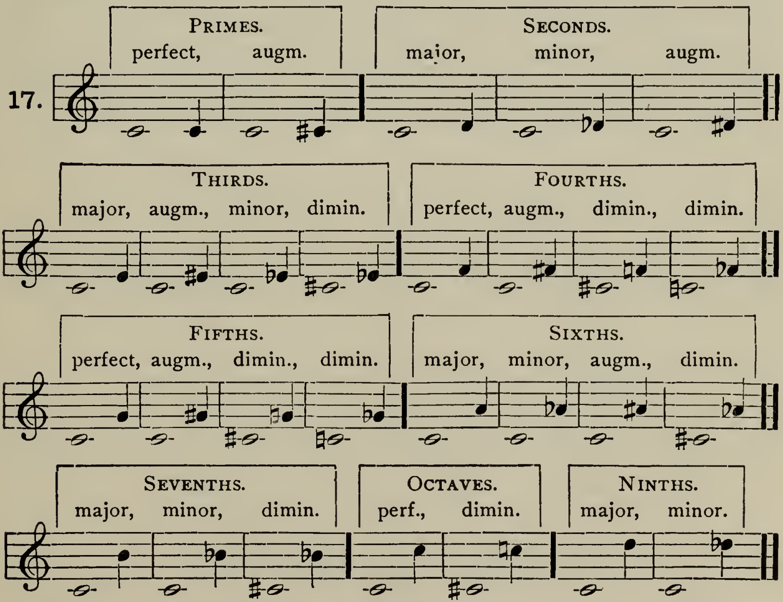


Remark. In melodic succession, diminished primes also occur; *e. g.*



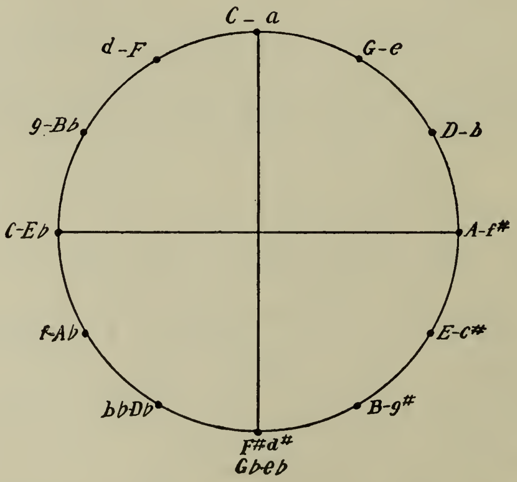
The intervals which may be used for the erection of chords, or in occasional chord-formations, are given in regular order in the following:

17.



§7. We have now learned all the intervals necessary for building up chords, and have erected them on and above the tone *C.*

To this end we chose the diatonic scale of *C*-major as a normal scale for our basis of operations. Although we may take it for granted that the student beginning the theory of music is practically acquainted with all the scales, we pause to remind him that we recognize two musical genera or modes, the major and minor modes, and two diatonic scales corresponding to the modes, called the major and minor scales. These latter are formed in accordance with definite laws, and can be erected on any tone whatever with a precisely similar arrangement of their tones. This arrangement we have already learned from the *C*-major scale (comp. No. 8).* When we start from any tone but *C*, we have to use chromatic signs for building up the scale; thus the scale of *G* takes one sharp (♯); that of *D*, two; *A*, three; *E*, four; *B*, five; and *F*♯, six sharps. The scales of *F*, *B*♭, *E*♭, *A*♭, *D*♭, and *G*♭ take from one to six flats (♭) respectively. Consequently, the scales having a signature are to be regarded simply as transpositions of the scales of *C*-major or *a*-minor. For scales beginning a perfect fifth above or below *C* or *a* we require one chromatic sign to obtain a similar arrangement of the intervals. Advancing either way by fifths, to get key-notes for beginning new scales, an additional chromatic sign must be added for each skip of a fifth, in order to build up scales exactly like the model scale. This is illustrated in the figure, which is called the "Circle of Fifths."

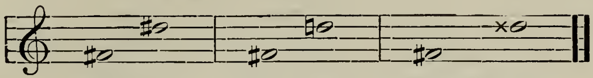


---

* The formation of the minor scale will be explained at length further on.

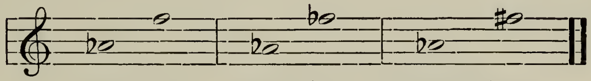
To get the major sixth above *F* ♯, we have to find the sixth tone in the scale of *F*♯-*major*, which is *D*♯. The minor sixth is therefore *D*, and the augmented sixth *D*×.

18.



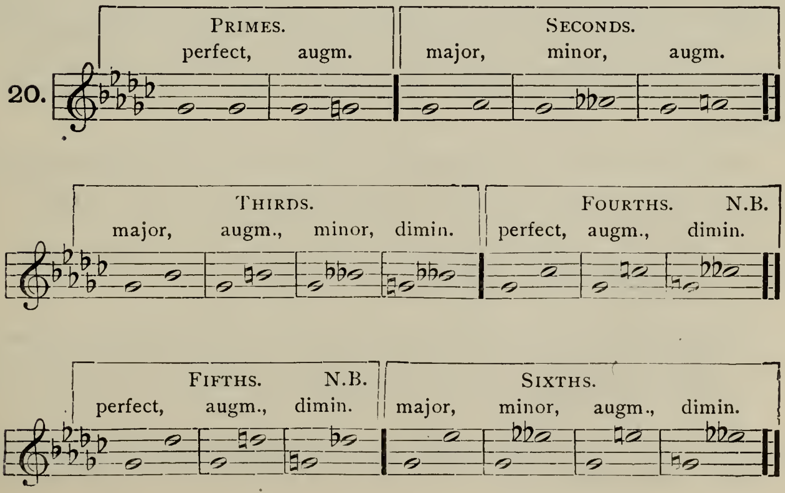
To get the major sixth of *A* ♭ we have to find the sixth tone in the scale of *A*♭-major, which is *F;* the minor sixth is therefore *F*♭, and the augmented sixth *F*♯.

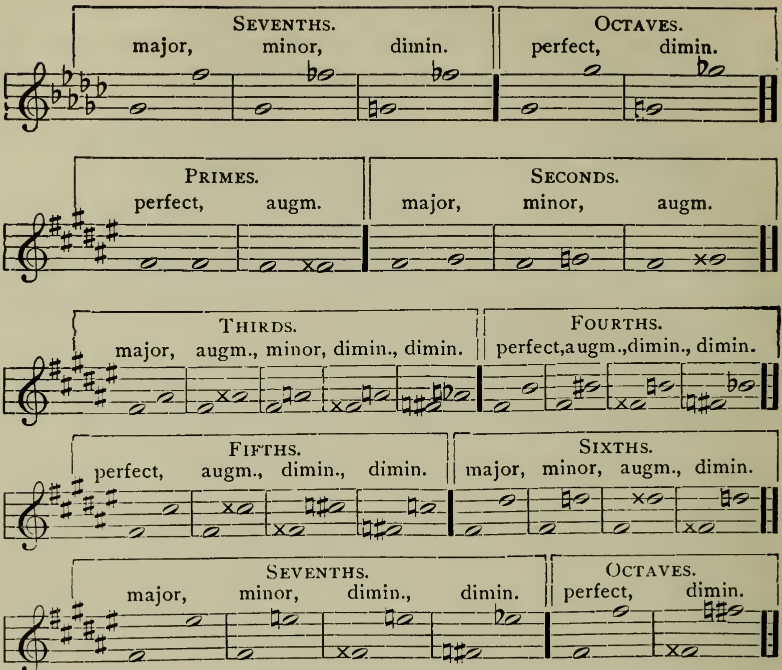
19.

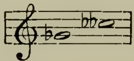
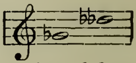


For the exact determination of all the intervals we have to employ all the chromatic signs — the Double-flat (♭♭), the simple Flat (♭), the Natural (♮), the simple Sharp (♯), and the Double-sharp (×) — in order to raise or lower the tones chromatically. To show this quite plainly to the pupil, we give below a view of the intervals as erected on the tones *G* ♭ and *F*♯. From the signatures it is evident that the scales of *G* ♭ and *F*♯ are taken as a basis.

20.

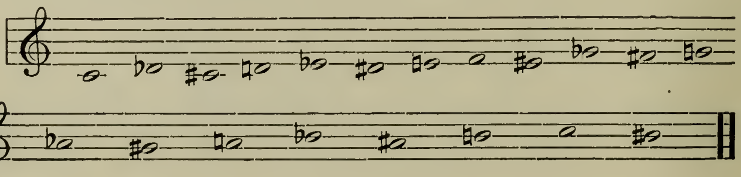




N. B. The diminished fourth  and diminished fifth  do not occur in practice, because we do not write in keys having more than 6 flats in the signature. The same is true of the corresponding intervals erected on the tones *B♭*, *E♭*, *D♭*, and *A♭*; but when erected on any other tone, they occur in chords. There are cases, however, in which the diminished fifth *B♭–F♭* can occur, e.g. in the chords of the seventh on the second and seventh degrees, in *a♭*-minor. The augmented third and diminished sixth based on the tone *G♭* may also, perhaps, though rarely, be met with, e.g. in altered chords of the keys of *G♭*-major and *e♭*-minor.

The first task to be undertaken by the pupil is to write out all the intervals from each single note, taking special care to get the correct musical orthography of the enharmonic tones. To aid him in doing so we give a view of the enharmonico-chromatic scale, the notes ordered according to the true pitch.

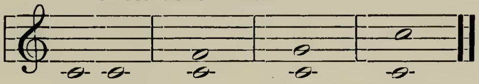
21.



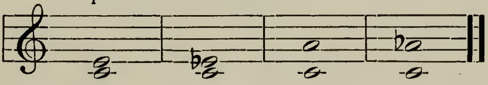
Hence we see that the minor second is a narrower interval than the augmented prime; that the minor third, *C–e*♭, is narrower than the augmented second, *C–d*♯; and the diminished fourth narrower than the major third, etc.

§8. Finally, we will observe that the intervals are classified as perfect consonances, imperfect consonances, and dissonances. The perfect consonances are the perfect prime (unison), the perfect fourth, the perfect fifth, and the perfect octave. The imperfect consonances are the major and minor thirds and the major and minor sixths. The dissonances are the major and minor seconds, major and minor sevenths, major and minor ninths, and all augmented and diminished intervals.

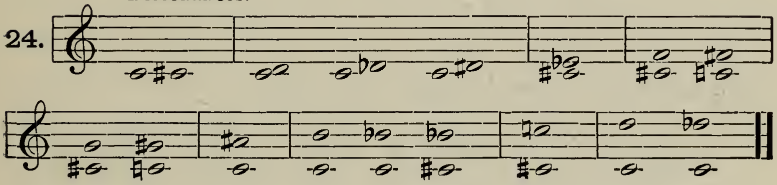
Perfect Consonances.

22. 

Imperfect Consonances.

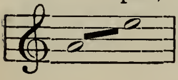
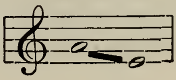
23. 

Dissonances.

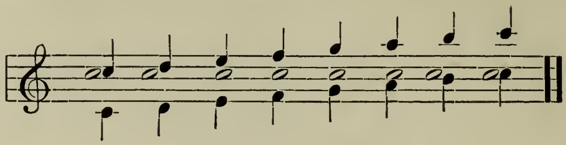
24. 

CHAPTER II.

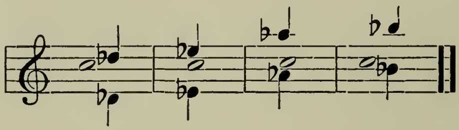
Intervals both Above and Below (inverted).

§9. We are obliged, both in the theory of chords and in our studies in counterpoint, to consider the relations of two tones contained within an octave when either of the said tones is uppermost. For example, the tone *E* above *A* forms the interval of a fifth  and below *A* that of a fourth 

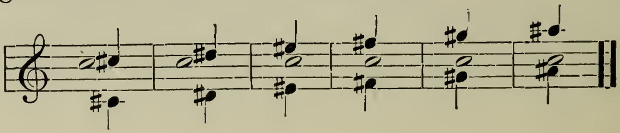
By erecting the intervals in the scale of *C*-major above *C*, and then inverting the intervals so erected above two-lined *C* by an octave, we obtain the following scheme:

25.


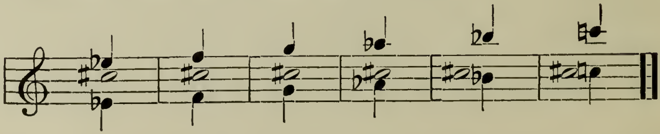
By inversion into the lower octave the perfect prime becomes a perfect octave; the major second becomes a minor seventh; the major third, a minor sixth; the perfect fourth, a perfect fifth; the perfect fifth, a perfect fourth; the major sixth, a minor third; the major seventh, a minor second; and the perfect octave, a perfect prime. Thus all perfect intervals (perfect consonances) remain perfect after inversion to their lower octave; major intervals become minor; and minor intervals become major.

26.


All augmented intervals become diminished:

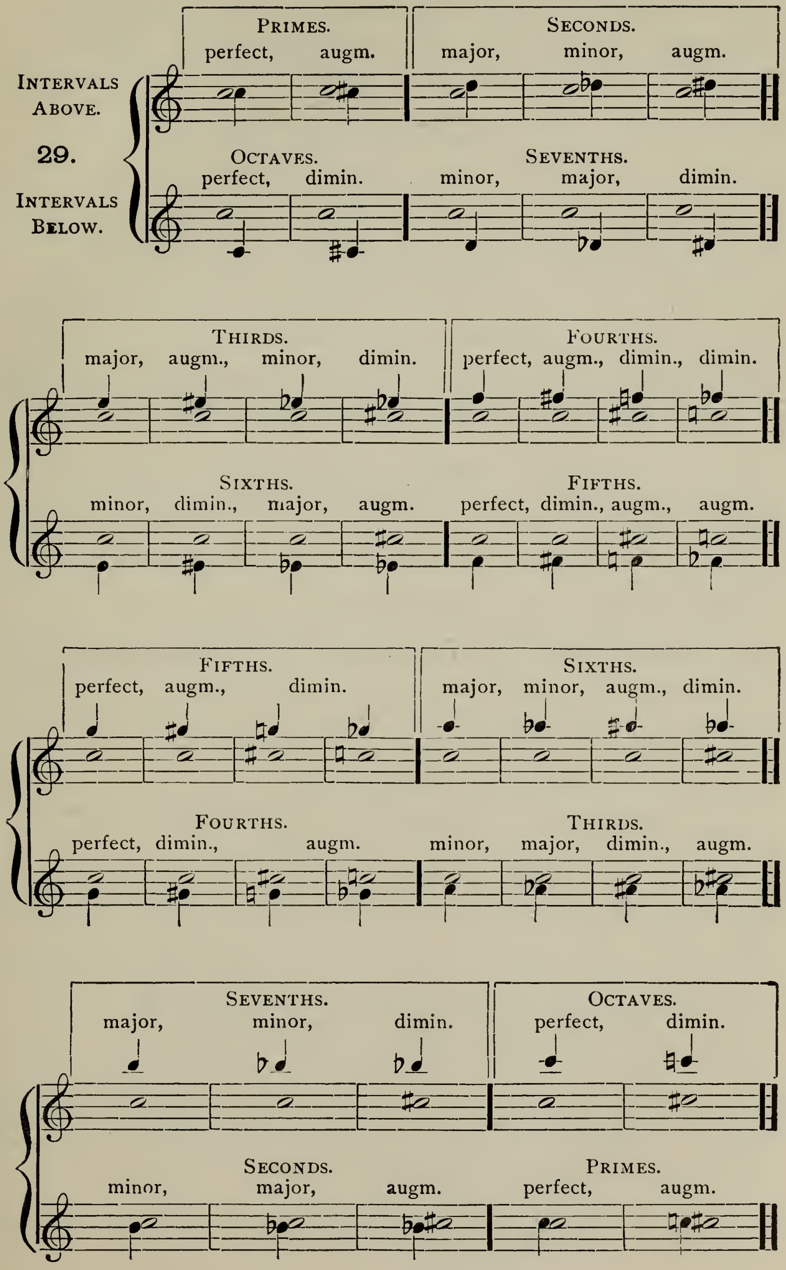
27.


All diminished intervals become augmented:

28.


To render the matter quite clear, we append a view of all the intervals, together with their inversions to the lower octave. The pupil should now write out in like manner all the intervals as erected on each of the other tones, in doing which he must take each of the other eleven major scales in turn as a basis.

29.


INTERVALS ABOVE.
INTERVALS BELOW.
PRIMES.
perfect, augm.
SECONDS.
major, minor, augm.
OCTAVES.
perfect, dimin.
SEVENTHS.
minor, major, dimin.
THIRDS.
major, augm., minor, dimin.
FOURTHS.
perfect, augm., dimin., dimin.
SIXTHS.
minor, dimin., major, augm.
FIFTHS.
perfect, dimin., augm., augm.
FIFTHS.
perfect, augm., dimin.
SIXTHS.
major, minor, augm., dimin.
FOURTHS.
perfect, dimin., augm.
THIRDS.
minor, major, dimin., augm.
SEVENTHS.
major, minor, dimin.
OCTAVES.
perfect, dimin.
SECONDS.
minor, major, augm.
PRIMES.
perfect, augm.

The other inversions of the intervals by a tenth or twelfth can be passed over for the present. But for the exercises in double counterpoint we shall be obliged to pay special attention to them.

CHAPTER III.

Theory of the Chords.

THE FUNDAMENTAL CHORDS AND THEIR INVERSIONS, AND ALSO THE ALTERED CHORDS DERIVED FROM FUNDAMENTAL ONES.

§10. All chords are classified either as Triads, i.e. those composed of three tones; or as Chords of the Seventh, which have four different tones.*

We divide the triads, to begin with, into *independent* and *dependent* chords.

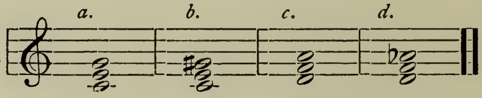
We call triads *independent* which are composed solely of consonant intervals, having either a major or minor third and a perfect fifth (reckoning from the fundamental). On the other hand, triads are *dependent* which contain a dissonant interval, a diminished or augmented fifth.

All chords of the seventh are *dependent*.

Every *dependent* chord seeks and calls for progression to an *independent* chord.†

As we have to occupy ourselves first of all with the triads, we give for the present examples of independent and dependent triads only.

30.



---

*At the close of the chapter "On Suspensions" we shall explain in detail why it is that accidental chord-formations, which earlier text-books termed chords of the ninth, or even chords of the eleventh and fifteenth, cannot be treated as distinct chords. By that time the pupil will have reached a standpoint from which he can intelligently follow our explanations.

† Two or more dependent chords can, however, occur in succession, only the last one must resolve to an independent chord.

a. Has a major third *E* and perfect fifth *G*, reckoned from the root (i. e. the tone on which it is based), and is an independent triad.

b. Has on the contrary the dissonant augmented fifth *G♯* to its root *C*, and is therefore a dependent triad.

c. Has a minor third and perfect fifth reckoned from the root, thus being an independent triad.

d. Though having a minor third *F*, this triad is completed by a dissonant diminished fifth *A♭*, reckoned from the root, and is consequently a dependent triad.

§11. Every triad is formed by the addition to its root of the third and fifth above it. According as the third is major or minor we obtain, provided that the fifth of the root is perfect, either the

Major Triad,

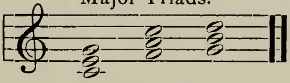
having a major third and perfect fifth, reckoning upward from the root; or the

Minor Triad,

having a minor third and perfect fifth.

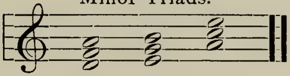
Major Triads.

31.



Minor Triads.

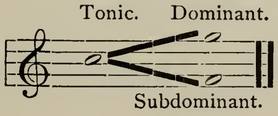
32.



By altering the relation of the fifth to the root we obtain other varieties of triads, which we shall take up further on.

A triad can be erected on any degree of the scale; the most important ones, the Fundamental Triads, are found on the 1st, 5th, and 4th degrees. The above three degrees of the scale, i. e. the Prime, Fifth, and Fourth, have also received the special names of Tonic, Dominant, and Subdominant respectively.

33.



The triad on the first degree is therefore called the

TONIC TRIAD;

that on the fifth degree, the

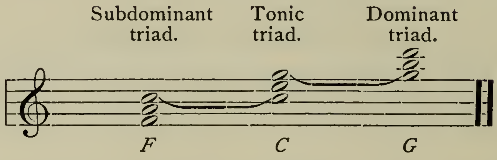
DOMINANT TRIAD;

and that on the fourth degree the

SUBDOMINANT TRIAD.

The closeness of their relations to each other will be seen by the following grouping.

34.



From the apex of the tonic triad, the fifth *G*, the dominant triad is evolved upward; while the root of the tonic triad forms the apex or fifth of the subdominant triad. These three triads contain all the tones of the *C*-major scale, and display, in their grouping and artistic combination, the characteristics of the key. All three fundamental triads are major triads.

§12. For effecting the interconnection of these triads according to the rules of musical art, we take a mixed four-part vocal chorus as the most suitable medium, consisting of Soprano and Alto (female voices), and Tenor and Bass (male voices).*

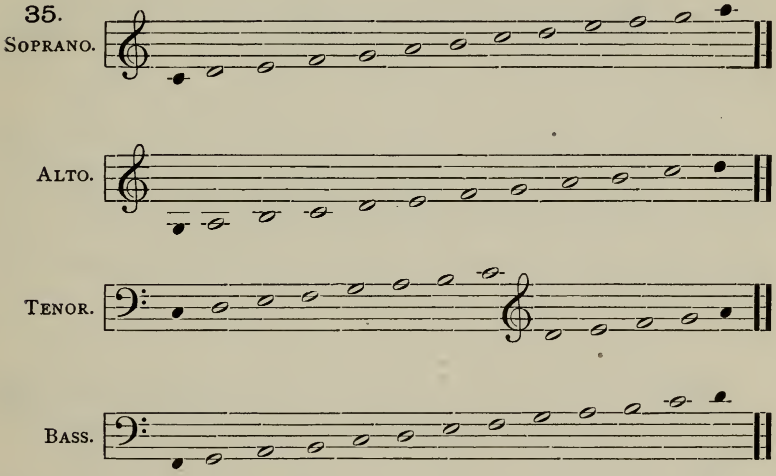
The compass of the high female voices (called soprano or treble) in a chorus may be assumed in general as reaching from c^1 to g^2, or even to a^2. The range of the low (alto) female voices is from

---

*Our reason for choosing a four-part mixed vocal chorus as the imaginary executant of these as well as of all following exercises, is easily apparent. All our exercises are preparatory studies to Counterpoint. Counterpoint, however, requires the independent leading of each part, and its innermost essence is *vocal.* In it we have nothing to do with harmonic masses, with chords, or with a predominating principal melody to which all the rest occupy the subordinate position of a chord-accompaniment, as is often the case in modern compositions for the pianoforte, the harp, the organ, or orchestra. In *all* contrapuntal compositions, on the contrary, even if not intended for singing, every part must be *melodious*, and its leading governed accordingly. And as our preparatory exercises in the interconnection of chords are in closest touch with the later studies in counterpoint, even containing, though the pupil does not realize it at first, a great deal of contrapuntal work, we are obliged from the outset to assume the vocal chorus as the executant of all our exercises, and to work them out in this sense.

a (or even *g*) of the small octave up to c^2, or d^2. The high male voices (tenor) correspond to the soprano an octave lower, reaching from *c* of the small octave up to g^1 or a^1. The low male voices (bass) have a compass from *G* or even *F* of the great octave up to c^1, or occasionally to $d^1\flat$ or d^1, of the one-lined octave. We term the soprano and bass the outer parts, and the alto and tenor the inner parts. The range of the voices of a chorus may therefore be exhibited thus:

35.

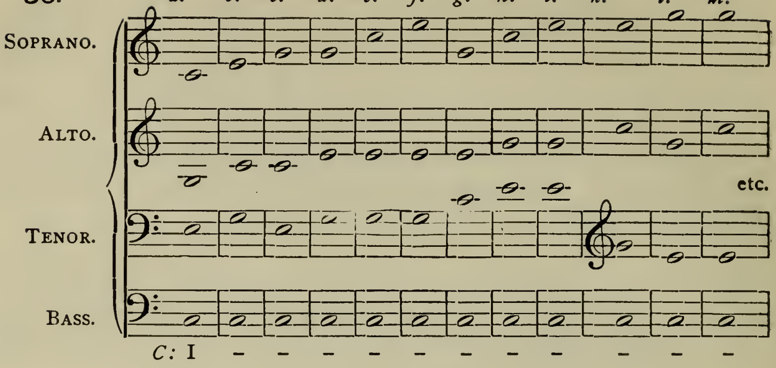


§13. When a triad is to be sung by a four-part chorus, one of its intervals evidently must be doubled, and sung by two different vocal parts either in unison or in the octave (or double-octave). The following rules apply to such doubling:

Any tone of the triad may be doubled; the root is best suited for doubling, the *fifth* less so, and the *third* least of all, because this latter, according as it forms a major or minor third with the root, is most sharply prominent in characterizing its triad as major or minor.

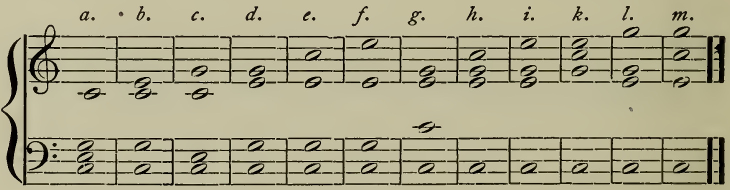
We can write the tonic triad of *C*-major for a mixed vocal chorus in a great variety of forms; e. g.

36.



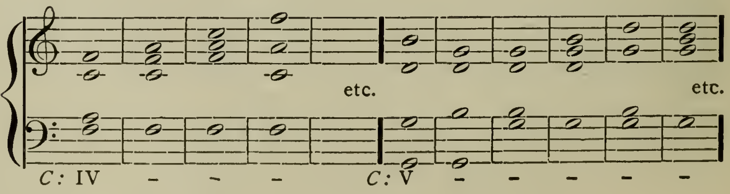
This style of notation, in which each part has a separate staff, is called a Score. But as we do not need it for our first and very simple exercises, we shall choose instead the style of notation on two staves (short score) with the violin and bass-clefs, which will afford the pupil a more convenient view. Written thus, No. 36 appears as follows :

37.



At *a* the root is doubled in the soprano ; at *b* and *c*, in the alto ; at *e*, in the soprano ; at *g*, in the tenor ; at *k* and *m*, in the alto ; at *d* and *l* the fifth is doubled ; while the third is doubled at *f* and *i*. The triads of the dominant and subdominant may be written out in the same way.

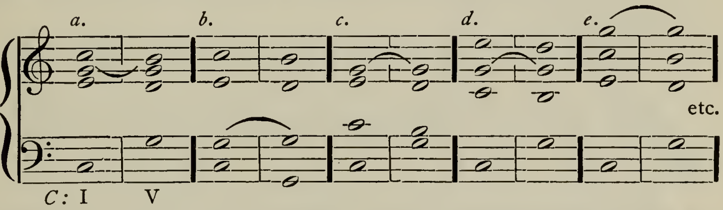
38.



§14. In order to effect the interconnection of these three triads according to the rules of strict composition, the first and leading principle to be kept in view is to lead the parts in such a way as to render execution as easy, convenient, and natural as possible for the singers. For this reason, when one tone belongs to two successive chords, we prefer to keep that tone in the *same part*, and lead the other parts to those tones of the new chord which lie *nearest* to them.

Thus Ex. 39 shows us some progressions of the tonic triad to the dominant triad, both being in the fundamental position, i. e. the position in which the root of the chord lies in the bass.

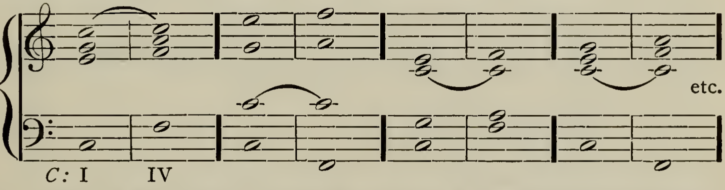
39.



In Ex. 39 (*a*) the alto holds the tone *G*, which belongs to the tonic triad as fifth, and to the dominant triad as root. In Ex. 39 (*b*) the tenor holds *G*, which the soprano holds in 39 *c*, etc.

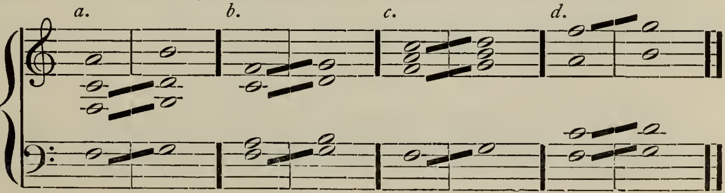
Ex. 40 exhibits progressions between the triads of the tonic and the subdominant.

40.



§15. But if we wish to let the triads of the subdominant and dominant follow in succession, the connecting link of a tone common to both is lacking. In this case we must lead the tones of the first chord into those of the second in such a manner, that no part shall progress in *unison* with, or in *parallel fifths* or *octaves* with, any other. The following progressions are *entirely wrong*.

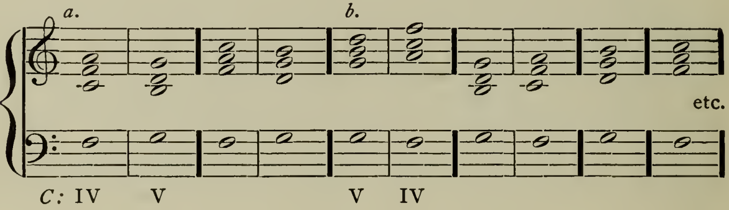
41.



In 41 (*a*) the tenor and bass progress in unison from *f* to *g*, and at the same time in parallel fifths with the alto, which progresses from c^1 to d^1. At *b* we find parallel octaves between the soprano and bass, and parallel fifths between the bass and alto; at *c* are parallel octaves between the tenor and bass; besides, both parts progress in parallel fifths with the soprano. Finally, Ex. 41 (*d*) shows parallel octaves between the soprano and bass, and parallel fifths between the tenor and bass.

Our sole resource for avoiding these gross mistakes is, not to lead the bass in parallel motion to the other parts, but in contrary motion, leading the higher parts to the tones of the new chord which lie nearest them; e. g.

42.



Ex. 42 (*a*) shows correct progressions from the triad of the subdominant to that of the dominant; Ex. 42 (*b*) shows like progressions from the dominant to the subdominant triad.

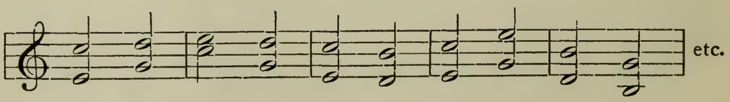
§16. The pupil therefore has to distinguish between three different styles of chord-progression, namely:

a. *Parallel motion*,
b. *Oblique motion*, and
c. *Contrary motion*.

Parallel motion is the progression of two parts in the same direction by either a step or a skip. Under certain conditions even three parts can progress, stepwise, in the same direction.

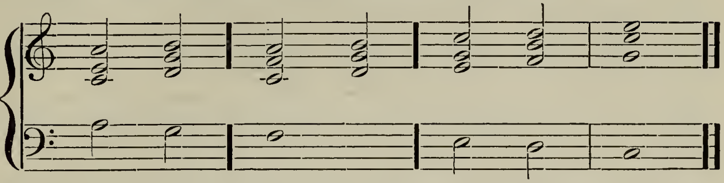
In the interconnection of triads, the leading of four parts in parallel motion will always yield faulty progressions, and should be carefully avoided later, when effecting progressions between other chords; it is permissible in only a few rare cases. Ex. 43 shows parallel motion between two parts.

43.



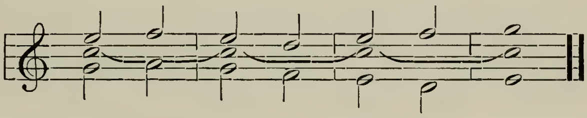
Ex. 44 shows parallel motion between three parts.

44.



Oblique motion is brought about when one part ascends or descends, while another part remains stationary. Thus in Ex. 45

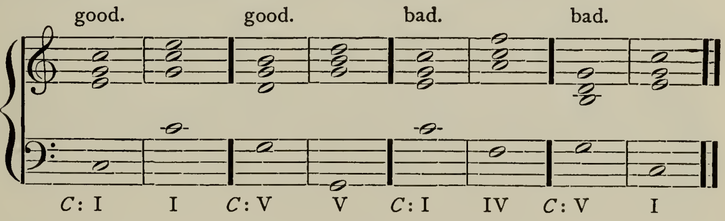
45.



both the higher and the lower parts progress in oblique motion to the middle part.

In Examples 42 (*a*) and (*b*) we have already had instances of *contrary* motion. By employing either oblique or contrary motion we can best avoid faulty progressions in unison, or in parallel fifths or octaves. We must also avoid leading three, or even all four, parts by a skip from one chord to another. *This is allowable only when a transposition of the first chord is obtained thereby.*

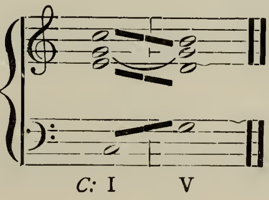
46.



Parallel unisons, octaves, and fifths can occur, of course, only in parallel motion.

The above three modes of progression in the parts are combined in the following example.

47.



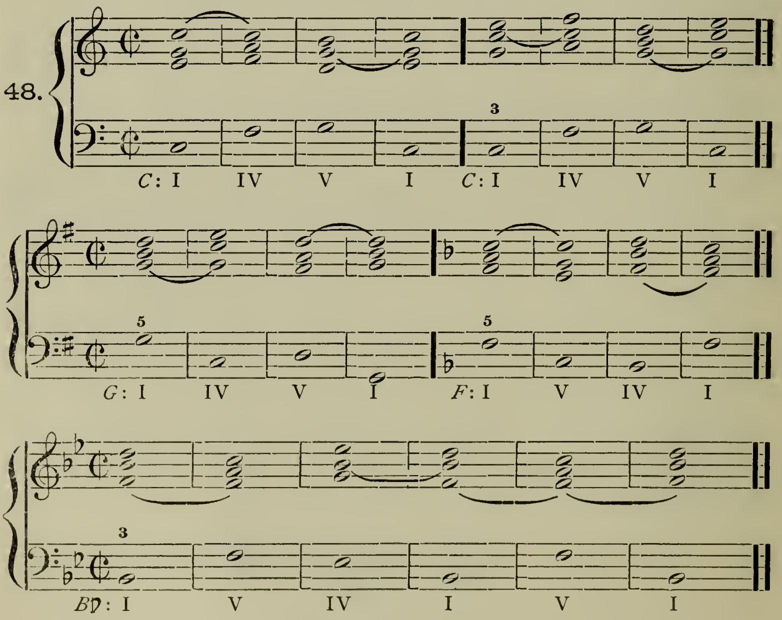
Here the soprano (*c*) and tenor (*e*) progress together in parallel motion, but in oblique motion to the alto and in contrary motion to the bass; the bass at the same time moving in oblique motion to the alto.

REMARK. An explanation of the reasons for prohibiting parallel unisons, octaves, and fifths, in strict composition, would be incomprehensible to the pupil.

§17. Exercises for the interconnection of the fundamental triads of the tonic, dominant, and subdominant.

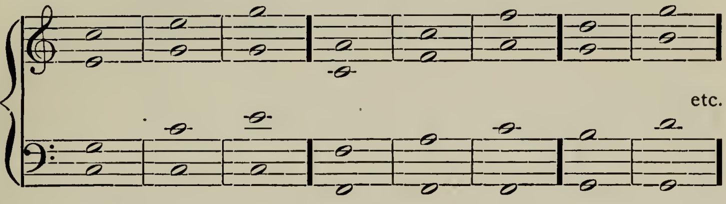
To begin with, we mark the bass with the degree-numbers I, V, and IV, because the triads in question have their seat on the 1st, 5th, and 4th degrees of the scale respectively. The Arabic numerals over the first bass note indicate the place of the soprano as the third or fifth of the chord. When the soprano is to take the octave or double-octave of the bass, it requires no distinguishing mark; though in some cases where it appeared necessary or desirable a figure 8 is written above the first bass note.

48.



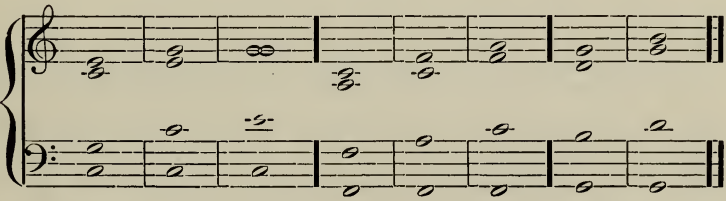
The notation of all these examples is such, that the three highest parts — soprano, alto, and tenor — are kept close together, not spreading beyond the compass of an octave. This is called the *close harmony* of the parts. In our first exercises we shall use close position exclusively. Opposed to close harmony is *open harmony*, in which the three above-mentioned highest parts are spread out beyond the compass of an octave. The following chords are written in open harmony.

49.



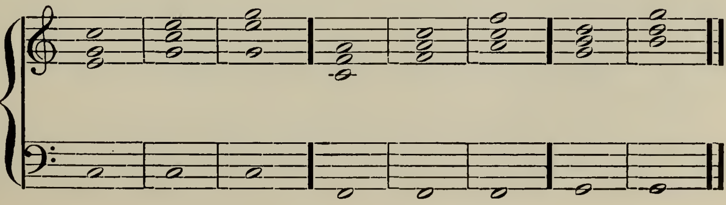
Open harmony may be changed to close harmony when any part can be transposed by an octave in such a way as to bring the three highest parts within the compass of an octave. Thus the chords of Ex. 49 may be brought into close harmony by transposing the soprano into its lower octave, between the alto and tenor.

50.



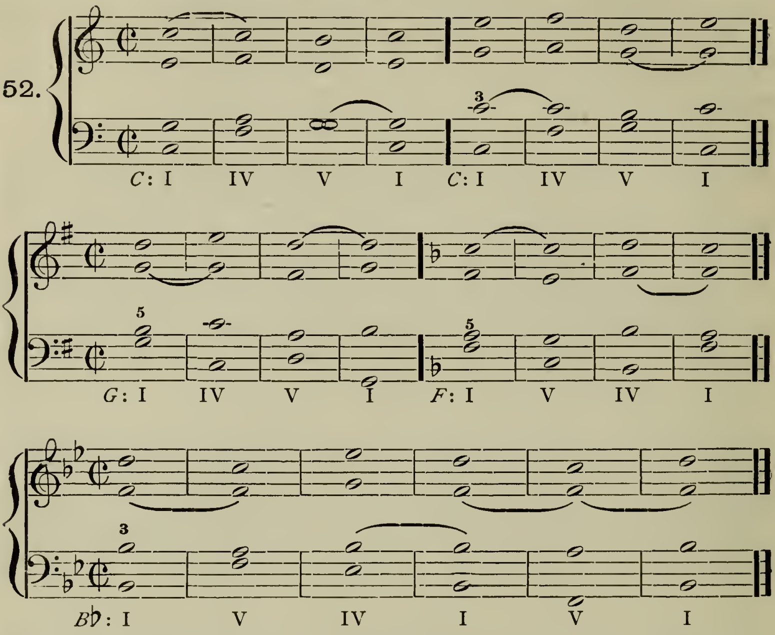
By transposing the tenor into its higher octave, between the alto and soprano, we again obtain close harmony.

51.



Ex. 48 can be written out in open harmony as follows, by transposing the alto into its lower octave.

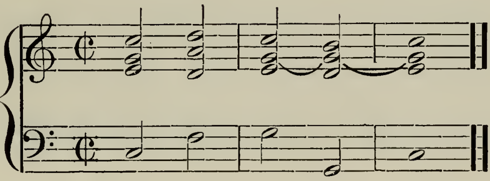
52.



On the basses given below, which contain the roots of the fundamental triads in different keys, the pupil should now write out exercises in the interconnection of the tonic, dominant, and subdominant triads in close harmony, after the model given in Ex. 48. Under the several bass notes he should set the figures I, V, and IV, as a constant reminder that in all the different keys he simply has to do with the triads on the 1st, 5th, and 4th degrees. From the very outset he ought to accustom himself to consider, when working in *C*-major, the triad *F*–*A*–*C* as the triad on the 4th degree, and not as the triad on the 1st degree in *F*-major. The triad *F*–*A*–*C* becomes, in *F*-major, the tonic triad; in *B♭* major, the dominant triad; and in *C*-major, the subdominant triad. In *F*-major it has its seat on the 1st degree, in B♭ major on the 5th, and in *C*-major on the 4th.

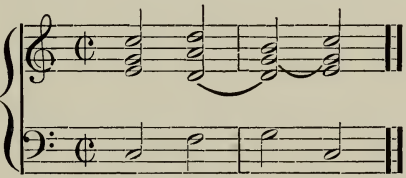
§18. Before taking up the exercises, attention must be called to the different forms of Close, to be employed in these and in all succeeding ones. The closing chord of any piece must always fall on a strong beat, just after the close of a metrical phrase or period, and must consequently have the effect, both rhythmically and metrically, of a beginning, in order to form a complete close, and not an incomplete or half-close. Only thus will the hearer obtain the impression of a satisfactory close.

53.



Ex. 53 satisfies us because, following a metrical group of two measures, the chord of *C*-major enters on the first or strong beat of a new group. The next Example exhibits the direct opposite of this.

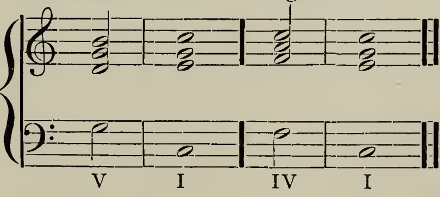
54.



Here no one can obtain the impression of a satisfactory close, because the last chord falls on the second or weak beat of a two-measure metrical group.

It is self-evident that the closing chord must always be that of the tonic. It may be prepared (preceded) by either the dominant or subdominant chord. In the first case we get an authentic close, in the second a plagal close.

55.

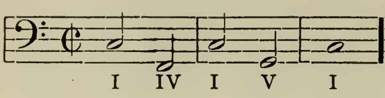


Further on, when discussing the authentic close, we shall take up this point in detail.

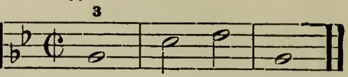
Exercises.

56.

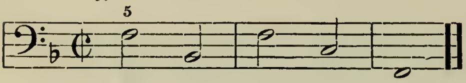
a.



b.

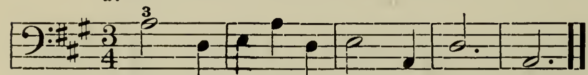


c.



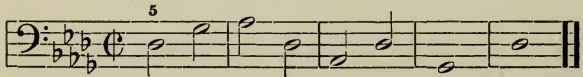
Also transpose into *G* and *F*♯.

d.



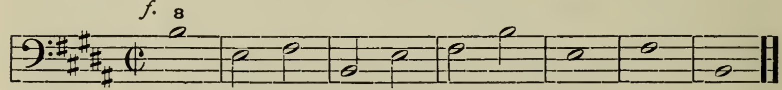
Also transpose into *A*♭ and *G*♭.

e.



Also transpose into *D*, *E*♭ and *E*.

f.



All the exercises are to be worked out only in close harmony. Later, after the pupil has attained a certain degree of proficiency in combining the chords, and has become familiar with the old clefs, we shall furnish exercises to be worked out in open harmony. Under the bass of all the exercises in this Manual the pupil should write Roman numerals to indicate the several degrees.

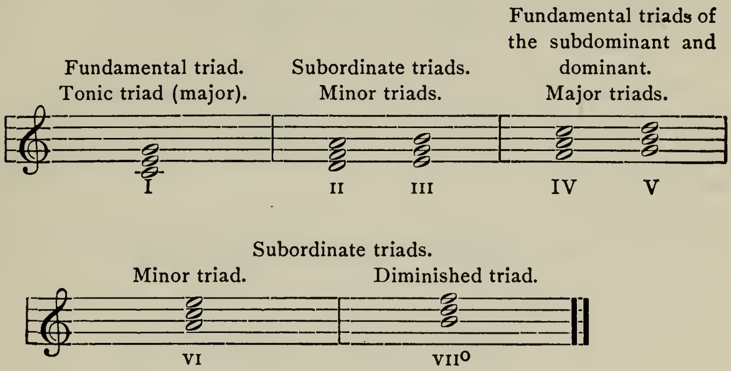
CHAPTER IV.

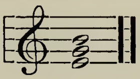
The Subordinate Triads in Major.

§19. We call the triads on the 2nd, 3rd, 6th, and 7th degrees of the major scale *subordinate* triads. The three first in order prove to be minor triads, as they have (reckoning from the root of each) a minor third and a perfect fifth. The triad on the 7th degree has (reckoning from its root) a minor third and a diminished fifth; we call it the diminished triad. As it contains a dissonant interval, the diminished fifth, it is a dissonant and dependent chord. To distinguish the three minor triads we employ smaller

Roman numerals, adding to the small numeral VII, which indicates the diminished triad, a cipher, thus (VII°), in accord with general usage. Below we now give all the triads of the major scale arranged in regular order.

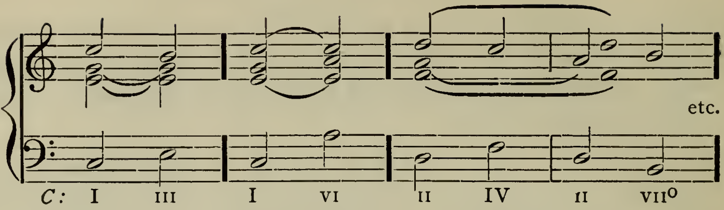
57.



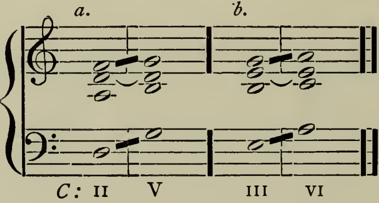
These are the triads proper to the key of C-major. Each of these chords also occurs in other keys. Each of them, except the diminished triad, can be set as the first or tonic triad of another key. The major triads found in *C*-major may occur in other keys as triads of the dominant and subdominant, and also (in minor keys) as triads on the 6th degree. The diminished triad, too, found in *C*-major on the 7th degree, can occur in other keys (*c*-minor, *a*-minor). In such cases all these chords belong to other keys or families of tones, as we will term them, and take on a changed significance according to their position in the key. The pupil must carefully note, that this triad  as given here is not the tonic triad in the key of *e*-minor, but the triad on the 3rd degree in *C*-major, it being a chord quite as proper to the latter key as to that of *G*-major (6th degree). In no other key does it occupy a position as important as it has in *e*-minor ; for in this key it is the chief member, whereas in the other families of tones it is a subordinate one.

§20. Now, in order to effect the artistic interconnection of the seven triads which we have learned, we shall, in progressions between chords possessing one or two tones in common, nearly always retain these common tones in the same parts.

All triads, the roots of which are either a third or a sixth apart, possess *two* tones in common ; e. g.

58.


All triads, the roots of which are either a fourth or a fifth apart, possess *one* tone in common. In *one* exceptional case, however, we must forbid the holding of this common tone, as the following example shows.

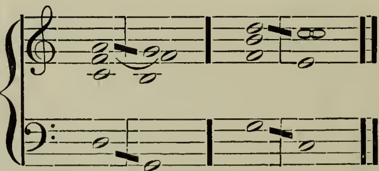
59.


The leading of the outer parts (soprano and bass) in Ex. 59(*a*) is entirely unallowable. These two parts progress in so-called

Covered Parallel Octaves.

§21. *Covered octaves* arise when two parts progress from different intervals, and in parallel motion, to an octave or double-octave. In our next exercises we shall prohibit the pupil from writing covered octaves only between the outer parts, and in case one or both parts progress upward by a whole tone, as shown in Ex. 59.*

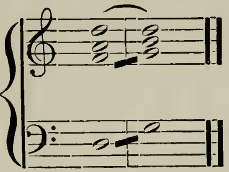
* In *downward* progression, however, the unpleasantness of such covered octaves, even in the outer parts, is far less apparent; e. g. in the progressions given in Ex. 60,

60.


no fault can be found with them; even the upward progression in Ex. 59 (*b*) is permissible, because the near relationship of the two chords — the triad *A–C–E* is the subdominant triad in *E*-minor—materially softens the effect of the covered octaves. But the triads *D–F–A* and *G–B–D* are not directly related, because in the key of *d*-minor, in which *D–F–A* is the tonic triad, the triad *G–B–D* does not occur; neither is the triad *D–F–A* found in *G*-major. This matter, and also the subject of covered octaves, will be treated at length in the Second Part of this book.

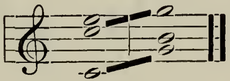
The above-mentioned covered octaves are permitted between the bass and an inner part, when the inner part reaches the octave of the bass by a step; e. g.

61.



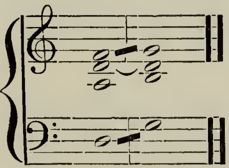
Covered octaves having an ill effect can therefore arise only in case both parts reach the octave by a skip from different intervals,

62.



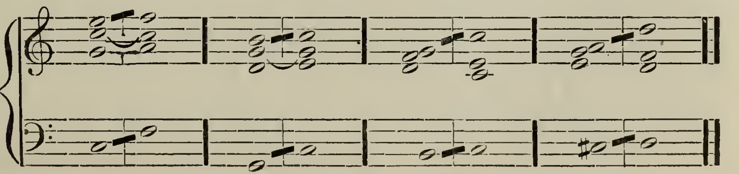
which is entirely unallowable, or when one reaches the octave by the step of a whole tone, and the other by a skip, as Ex. 63 shows.

63.



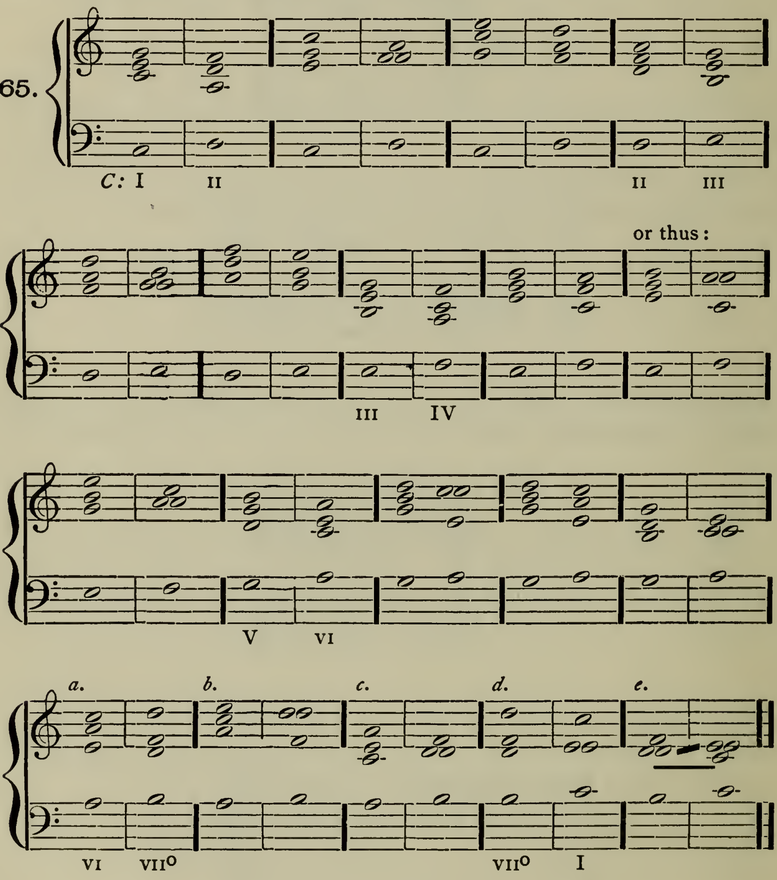
On the contrary, any covered octave in which one part enters the octave by a skip, while the other reaches it by the step of a semitone, may be written without hesitation between any two parts, even the outer parts. Such a progression of chords has no harsh or unpleasing effect, but (especially upwards) rather a very agreeable and natural one.

64.



§22. Common tones are never found in two triads on neighboring degrees of the scale, as we have already seen in progressions between the triads on the 4th and 5th degrees. In such cases contrary motion must always be employed, to avoid open parallel fifths and octaves. A few progressions of this kind are given below.

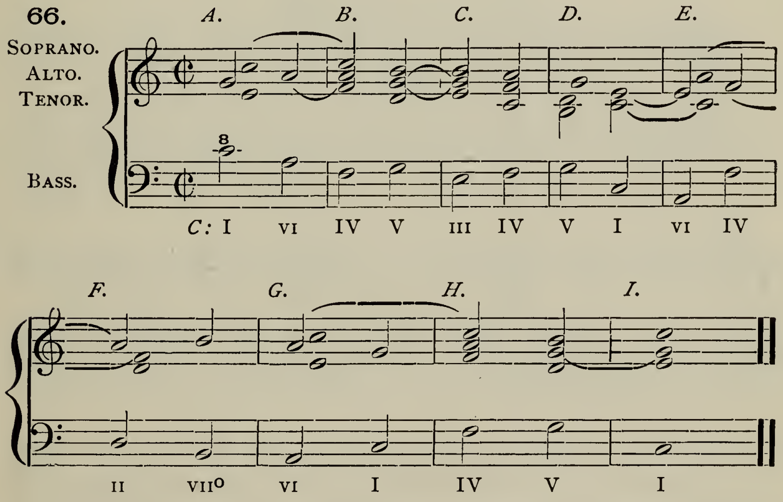
65.



§23. In the progressions marked *a*, *b*, *c*, *d*, and *e*, between the triads on the 6th and on the 7th and 8th degrees, it will be seen that the doubling of the root of the triad on the 7th degree is intentionally avoided. (In *C*-major this tone is *B*.) In every scale, the seventh degree is called the leading-note. The effect of this tone is very marked, particularly when it occurs either as third in the dominant triad or as root in the triad on the 7th degree. Its natural progression (especially in the outer parts) being upwards to the octave of the key-note, in case the next chord contains this tone, the leading-note can be doubled in strict four-part writing only in case the leading of the two leading-notes to the tones of the following chord can be effected unconstrainedly and without a faulty leading of the parts (parallel octaves).

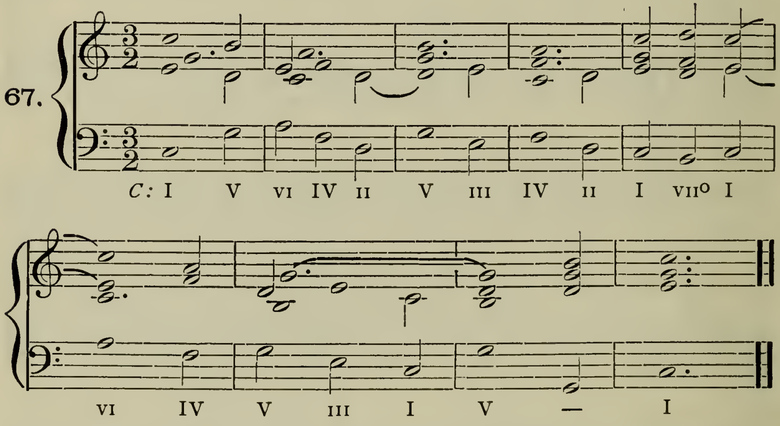
In the following example a doubling of the leading-note occurs, in chord 2 of measure 6, which is not merely *not incorrect* in this place, but is, on the contrary, the *best* leading of the parts, in view of the interconnection of the triads on the 2nd, 7th, and 6th degrees called for by the bass. The pupil should carefully study the three Examples, 66, 67, and 68, taking them as models for the exercises to be written on the basses given at 69. Explanations of these examples now follow.

66.

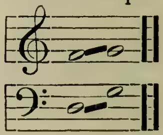


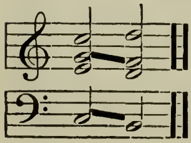
In measure *A* we see a progression from the triad on the 1st degree to that on the 6th. The 8 over the first bass note shows that the soprano takes the octave of the key-note. Both this tone and the *E* held in the tenor are common to both chords. We therefore retain them in both parts, and write them — because we regard them as held, continuous vocal tones — in whole notes; whereas we lead the alto from *G* to *A*, the nearest tone in the triad on the 6th degree. The progression of this latter chord to the following triad on the 4th degree, in measure *B*, is effected in the same manner. The soprano and alto hold *C* and *A*, and the tenor is led to *F*. The next-following progression from the triad on the 4th degree to that on the 5th can be executed only by contrary motion in the three highest parts against the bass. In measures *C* and *D* the interconnection of the triads on the 3rd, 4th, and 5th degrees, is likewise effected by contrary motion in the three highest parts against the bass, which ascends stepwise. Measure *E* contains the same progression of chords which we noticed before between measures *A* and *B*, with a different position of the higher parts. Measure *F* shows the above-mentioned doubling of the leading-note, which is correct here. From measure *F* to measure *G* we must employ contrary motion against the bass, which now descends stepwise; thus we can lead the leading-note upward unconstrainedly. Measure *H* contains a progression similar to that in measure *B*.

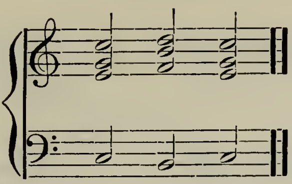
67.



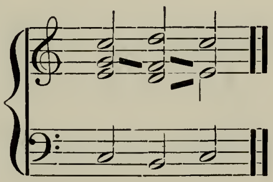
In passing from the second to the third measure of this Example we have covered octaves between alto and bass↘ which the pupil may, however, write *for the present* without hesitation, because they occur between an outer and an *inner part*. Measure 5 shows a progression from a perfect fifth to a diminished fifth, *descending*, in the chords This progression is a good one in most cases, and is just here decidedly preferable to a doubling of the leading-note, such as would occur if the alto were led from *G* up to *B*, as follows:



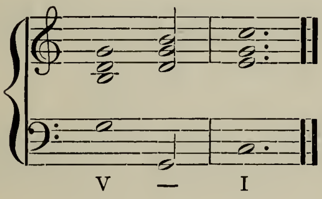




But the ascending progression of a diminished fifth to a perfect one must always be avoided. For this reason the alto must be led downward, and the third *E* in the triad on the 1st degree doubled by the alto and tenor.

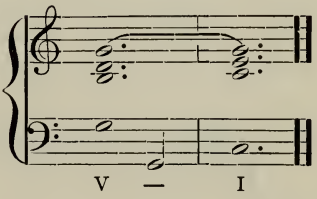


In Ex. 67, measure before the last, the three highest parts take the dominant triad in another position by a skip. This is unnecessary here, for the close of the example might have been written, instead of so:



N. B.

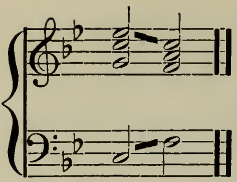
in this way:



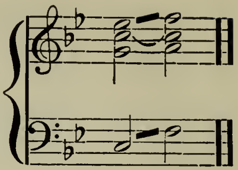
letting the soprano close on the fifth of the tonic triad.

§24. In the second measure of Ex. 68 we find an instance of contrary motion in the progression of the triad on the 2nd degree to that on the 5th, in order to avoid covered octaves with a *step of a whole tone* between the outer parts (soprano and bass), which octaves would have been produced by leading the two triads, instead of in contrary motion:

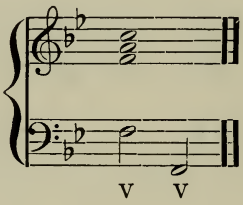
N. B. The skip in all three parts is entirely correct in this case, where merely one and the same chord is transposed.



in this way:

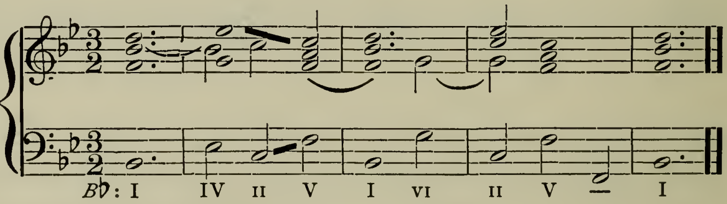


In the latter case the soprano *ascends by a whole tone* at *b.* Hence the covered octaves between the bass and soprano have a bad effect. In the last measure but one the three highest parts are held, while the bass skips down by an octave:



A progression of the highest parts is quite unnecessary in this case, as the bass in the low octave again calls for the same chord on the 5th degree. The leading at the close is such, that the soprano takes the third of the triad. Thus the pupil will perceive that the soprano is by no means obliged to close on the octave of the root of the tonic triad in every case, as many beginners wrongly suppose. The soprano may also close on the third or fifth of the triad.

68.

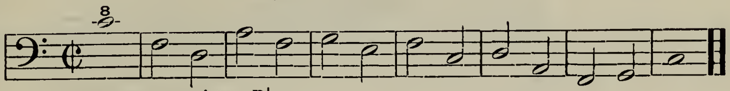


Before the pupil begins working out the exercises at No. 69, he should transpose Ex. 66 into *B♭*, *A*, and *A♭*-major, and Ex. 67 into *D*, *D♭*, *E♭*, and *B*-major. By this means he will learn the triads of the major scale in other keys much more thoroughly than by merely writing out the View of the Chords given at No. 57 in *C*-major. In No. 57 the chords are only written out disconnectedly;

in Ex. 66 and 67 he sees them as naturally inter-connected. The exercises at No. 69 are likewise to be transposed into the keys indicated.

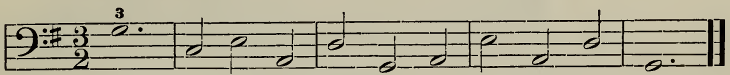
Exercises.

69. *a.*



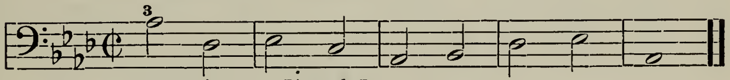
Also transpose into *D*♭.

b.



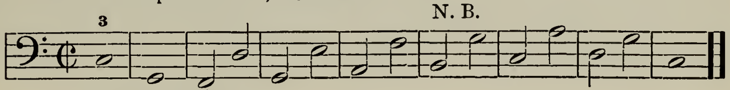
Also transpose into *F*, *F*♯ and *G*♭.

c.



Also transpose into *A*, *B*♭ and *B*.

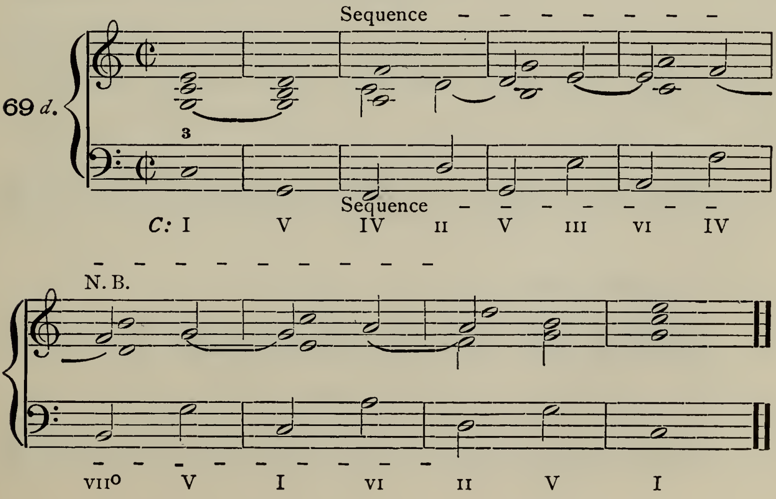
d.



Also transpose into *D*.

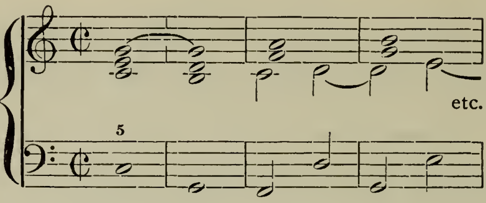
§25. The last exercise in No. 69, at *d*, calls for a few observations. At N. B. in measure 5 the leading-note *must be doubled*, because this gives the best leading of the parts above the bass, which continues through several measures in skips of one and the same interval. Such an undeviating leading of the bass, to which the leading of the highest parts must conform, is termed a Sequence. Exercise *d* would therefore be written thus :

69 *d.*



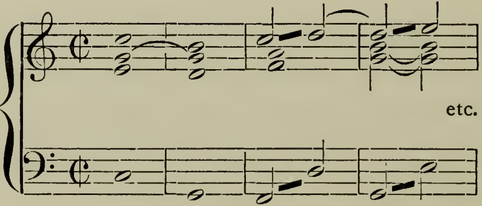
By letting the soprano begin on the fifth of the tonic triad, this exercise might also be worked out as follows:

69 *e.*

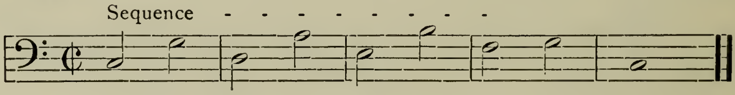


the pupil may finish it himself. If we were to let the soprano begin on the octave of the key-note, this exercise could not be written as a sequence conforming to the leading of the bass, on account of the covered octaves which would then occur between the outer parts; quite apart from the fact, that the highest parts would be forced to overstep their range.

69 *f.*

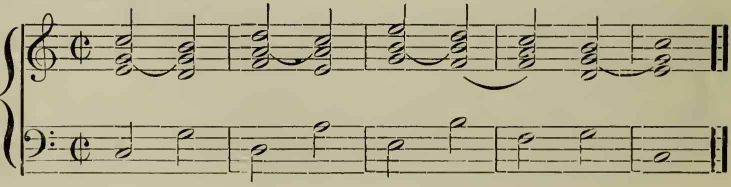


REMARK. In certain sequences we may, for the sake of the sequence, depart from our rule of retaining in the same parts the tones common to two chords. E. g. the following bass:

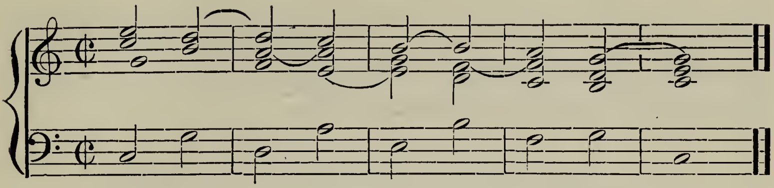


might be worked out thus:

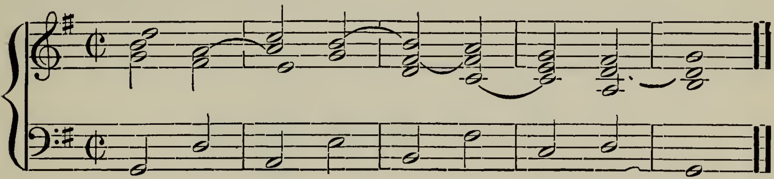
70.



or in this way:



or, in *G*-major, as follows:

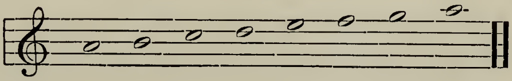


CHAPTER V.

The Minor Scale and its Triads.

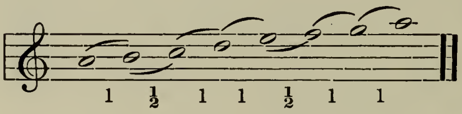
§26. The minor scale most nearly related to any major scale has the same signature as the latter; it begins on the sixth of the major scale, or, what amounts to the same thing, its key-note lies a minor third below that of its *relative major*. Thus *a*-minor is the relative minor to *C*-major, *d*-minor to *F*-major, *e*-minor to *G*-major, *g*-minor to *B*♭-major, etc. According to the signature, the tones of both scales would therefore be just alike, and the peculiar character of the minor scale would be due simply to its beginning the same series of tones in a different place, i. e. on the 6th degree in major.

71.

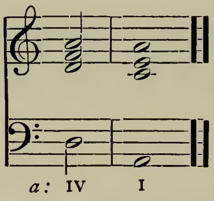


This change in the arrangement of the tones forming the scale of *C*-major lends to the scale of *a*-minor, beginning on the tone *a*, a totally different character. The intervals between the successive tones of this series are, from the first tone to the second a whole tone; from the second to the third, a semitone; from the third to the fourth, a whole tone; the same from the fourth to the fifth; from the fifth to the sixth, a semitone; and from the sixth to the seventh, and seventh to eighth, a whole tone each.

72.

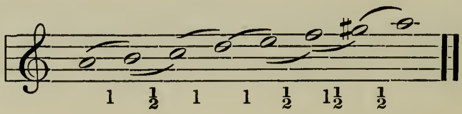


But as the authentic close, shown in Ex. 55, can be formed only by the aid of a *major* dominant triad preceding the closing chord, we could employ only a plagal close for pieces in minor keys, according to the minor scale as exhibited in Nos. 71 and 72. To make a major triad of this dominant triad, so as to obtain the authentic close in minor by its aid, we raise the 7th degree by a greater semitone. Now, through its relation as a minor second below the octave of the key-note, this tone takes on the character of a leading-note, and makes itself very sharply felt as such in the three triads of the minor scale in which it is contained.*



Thus the minor scale necessary for the erection of the chords is as follows, the intervals between the several successive tones being indicated by figures:

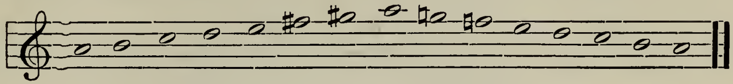
73.



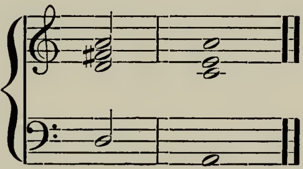
We call the above the *harmonic* minor scale, to distinguish it from the *melodic* minor scale, in which, for the sake of melodic progression, the 6th and 7th degrees are raised in ascending and lowered in descending.

---

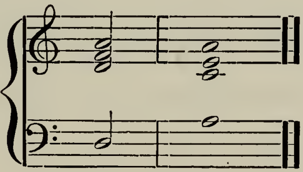
*The chromatic raising of the 7th tone of the minor scale must be specially indicated in each case where this tone occurs. To write it once for all at the head of the piece would be apt to give rise to mistakes, and would also be self-contradictory. Minor keys always have the same signatures as their relative major keys.

74.


The reason for not raising chromatically the 6th degree of the harmonic minor scale, which is used in erecting the chords, is plainly to be seen in the plagal close; for this close could never be formed in minor with a major triad preceding the tonic triad. The progression at 75

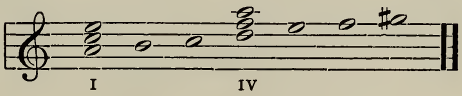
75.


is unnatural; that at 76

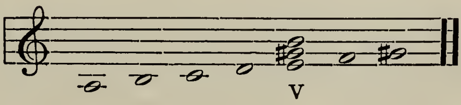
76.


natural.

§27. The fundamental triads of the minor scale are found, as in major, on the 1st, 4th, and 5th degrees. Those on the 1st and 4th degrees are minor.

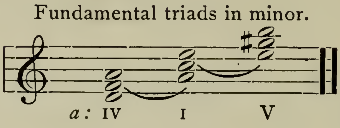
77.


The dominant triad becomes, through raising the 7th degree, a major triad.



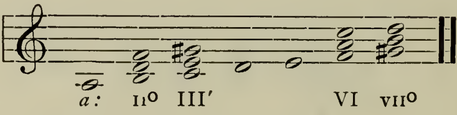
It therefore is formed exactly alike in major and minor; *E*–*G*♯–*B* is the dominant triad of both *A*-major and *a*-minor. These three fundamental triads in minor are related in just the same way as the fundamental triads in major, as shown in Ex 34.

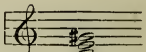
78.



On the remaining degrees of the minor scale the following triads are found.

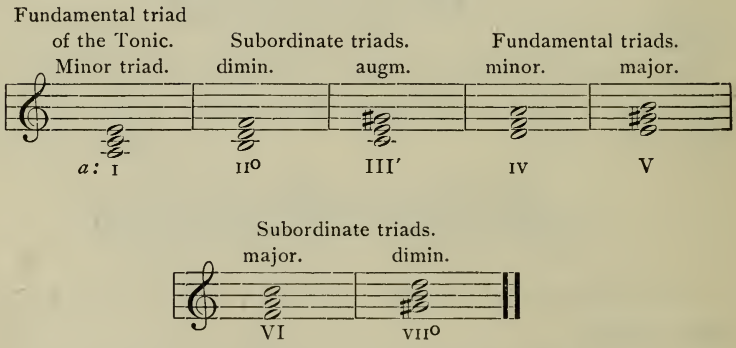
79.



Those on the 2nd and 7th degrees are diminished, that on the 6th degree is major. On the 3rd degree we find a new form of chord, a triad having a *major* third and an *augmented* fifth.  This we call the *augmented triad.* It is indicated by III′, as was shown in Ex. 79.

In Ex. 80 the triads of the minor scale are given in regular order.

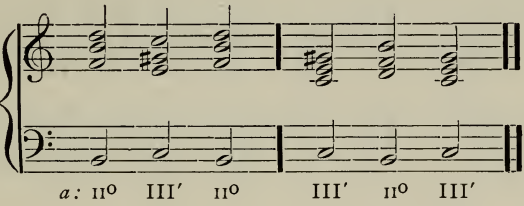
80.



In the minor mode there are only four *independent* triads; namely, the three fundamental triads on the 1st, 4th, and 5th degrees, and the secondary triad on the 6th. The dissonant triads on the 2nd, 3rd, and 7th degrees are *dependent* ones. The greater number of dissonant triads in minor — three as compared with the one in major — arises from the necessary chromatic raising of the 7th degree in minor. On account of these dependent dissonant chords, and especially of the interval of a whole tone plus a semitone between the 6th and 7th degrees, difficulties arise in the interconnection of the triads in minor, which we shall examine with care.

Progressions between triads like those in Ex. 81

81.

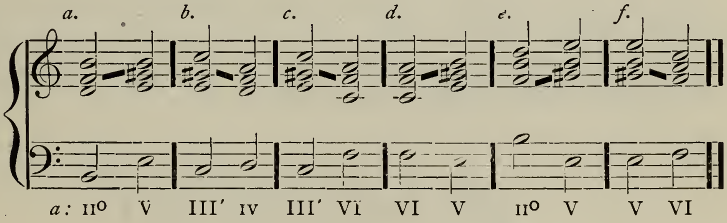


will occur in none of our exercises, although in these cases no objection to the leading of the parts can be raised.*

§28. The step of an augmented second, between the 6th and 7th degrees of the minor scale, is a melodic progression not easy to take with purity and confidence.† It must therefore be carefully avoided in progressions between the chords on the 6th and 7th degrees, and also in all other progressions where it might occur.

The following progressions are altogether wrong.

82.



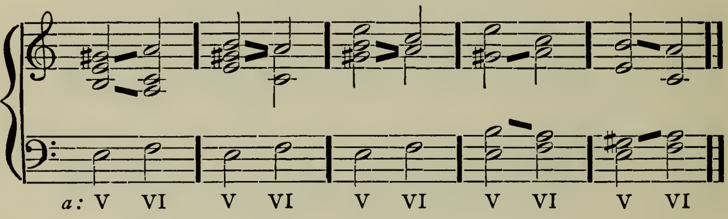
---

*In strict composition the rule obtains, to prepare dissonances and resolve them to consonances. The succession of several dissonant triads, the first of which is not prepared and the second does not resolve to a consonant chord, should therefore be avoided as transgressing the rules of strict composition.

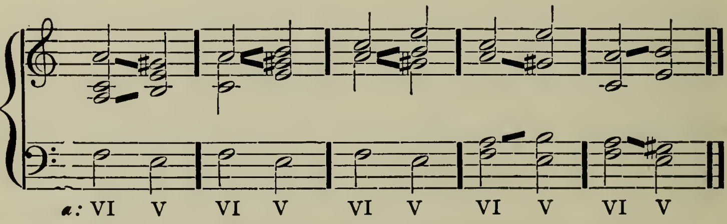
†The difficulty is most apparent in ascending progression, when the 7th degree is to be taken as a pure and strongly accented leading-note following the 6th. It is easier, to be sure, in descending progression, when the octave of the key-note is followed first by the 7th degree and the 6th sung next in order. But we must forbid the pupil to make use of either the ascending or the descending progression in the exercises of this text-book.

§29. The step of an augmented second can be avoided, between the 5th and 6th degrees, when the dominant triad is followed by that on the 6th degree, only by doubling the third of the latter. Where the triad on the 6th degree comes first, its third should be doubled. A few examples of such progressions follow.

83.

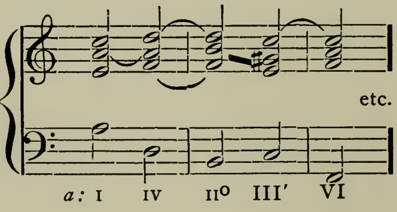


84.



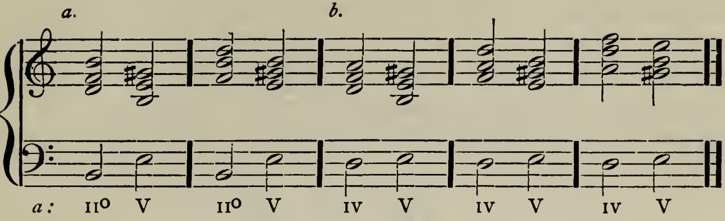
In case of a progression between the triads on the 2nd and 3rd degrees, which however rarely occurs, the step of an augmented second is to be avoided by contrary motion, which the stepwise progression of the bass calls for at any rate.

85.



For progressions between the triads on the 2nd and 5th degrees, and those on the 4th and 5th, contrary motion is also to be employed, although open parallel octaves could not arise in parallel motion between the 2nd and 5th degrees.

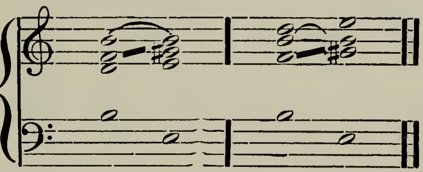
86.



In Ex. 86 (*a*) we have to depart from the rule of letting a tone common to two chords lie in the same part; for we can not (in close harmony) let the tone *B* lie, and lead *F* to *G*♯.

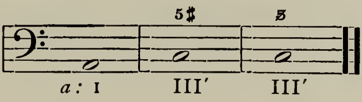
Progressions like this must always be avoided.*

87. *a.*



§30. As the chromatic alteration of the 7th degree in minor must be indicated in each separate case, we shall mark it, wherever contained in a chord called for by the bass, by writing the required sign (♮, ♯, or ♭,) over the bass note, the sign thus written always referring to the third above the bass note. Should it refer to some other interval from the bass — which in our next exercises can be only the fifth — we write the number of the interval over the bass note, and add to it the required chromatic sign; when this sign is a sharp, it suffices to draw through the figure a stroke slanting up from left to right; e. g.

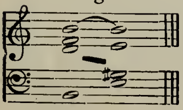
87. *b.*



Although the triad in its fundamental position is not usually indicated in the figuring, in this case it becomes necessary to indicate

---

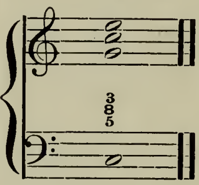
* Taking the same in open harmony, *B* might be held in the same part; e. g.



But for the present the pupil should work only in close harmony, so as not to be perplexed by the difficulties of leading the parts in open harmony; besides, we do not need the latter for our present purposes.

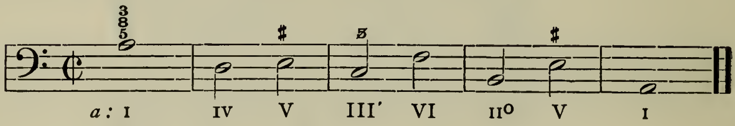
the fifth of the bass to be raised by a figure and sign, or figure and stroke. As we have seen before, it may also be necessary to figure the first triad, in order to show the position of the soprano and, by implication, that of the other parts as well. We can use the single figures 3, 5, or 8, or the combinations $\substack{5\\3}$, $\substack{8\\5\\3}$, or in the following case $\substack{3\\8\\5}$.

87. *c.*



Thus the figuring of the following bass calls for

88.



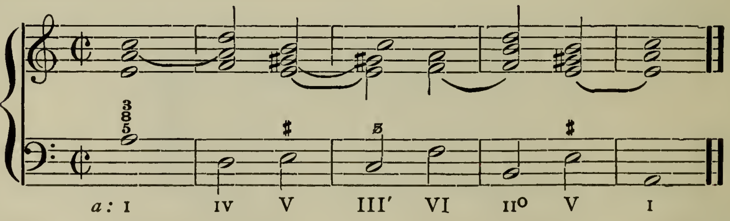
1. An arrangement of the highest parts in which the soprano takes *c''*, the alto *a'*, and the tenor *e'*. From this the leading of the highest parts can be deduced according to the rules given for the leading of the parts.

2. The sharp over the third bass note *E*, which has no figure, shows that the third of the bass note (in the dominant triad) is to be chromatically raised.

3. The crossed figure 5̸ over the fourth bass note shows that the fifth of the augmented triad must be *g*♯.

The example is worked out below.

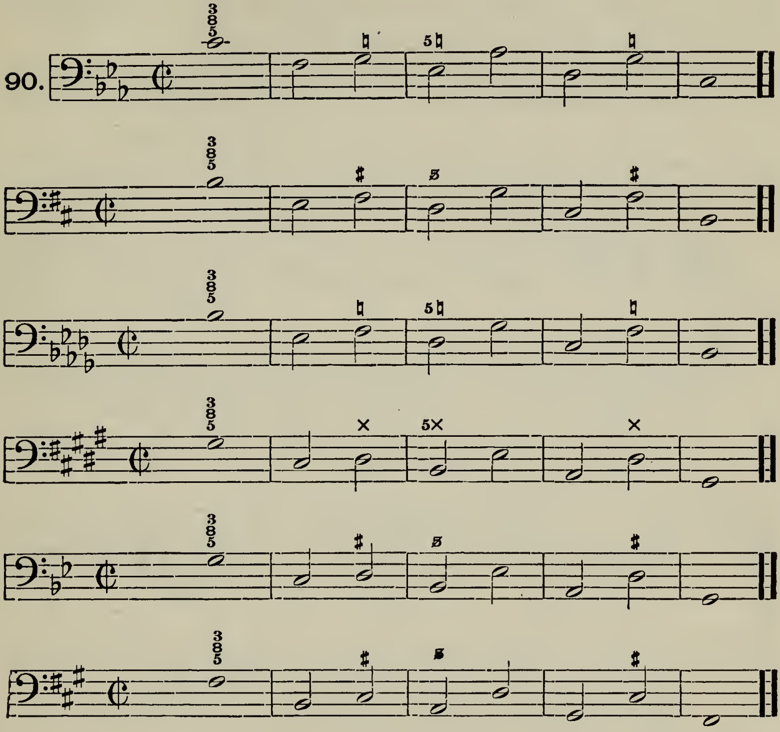
89.



The pupil should transpose Ex. 89 into *c*-minor, *b*-minor, *b*♭-minor, *g*♯-minor, *g*-minor, *f*♯-minor, and *f*-minor, that he may also become familiar with the triads of the minor scale in other keys. To this end we write out the transposed basses, with the chromatic signs proper to each key.

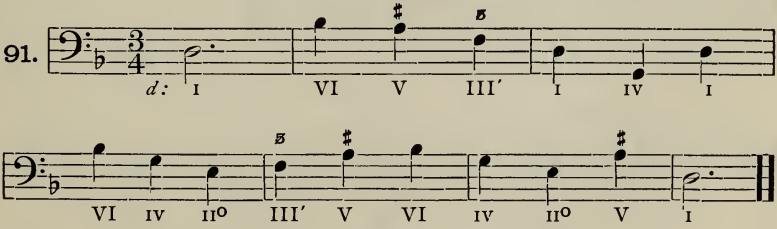
All figures and signs written above the bass notes belong to *Thorough-bass Notation.*

90.



§31. The following bass requires, in measure 2, a progression between the triads on the 6th and 5th degrees, and in measure 5 a progression from the dominant triad to that on the 6th degree.

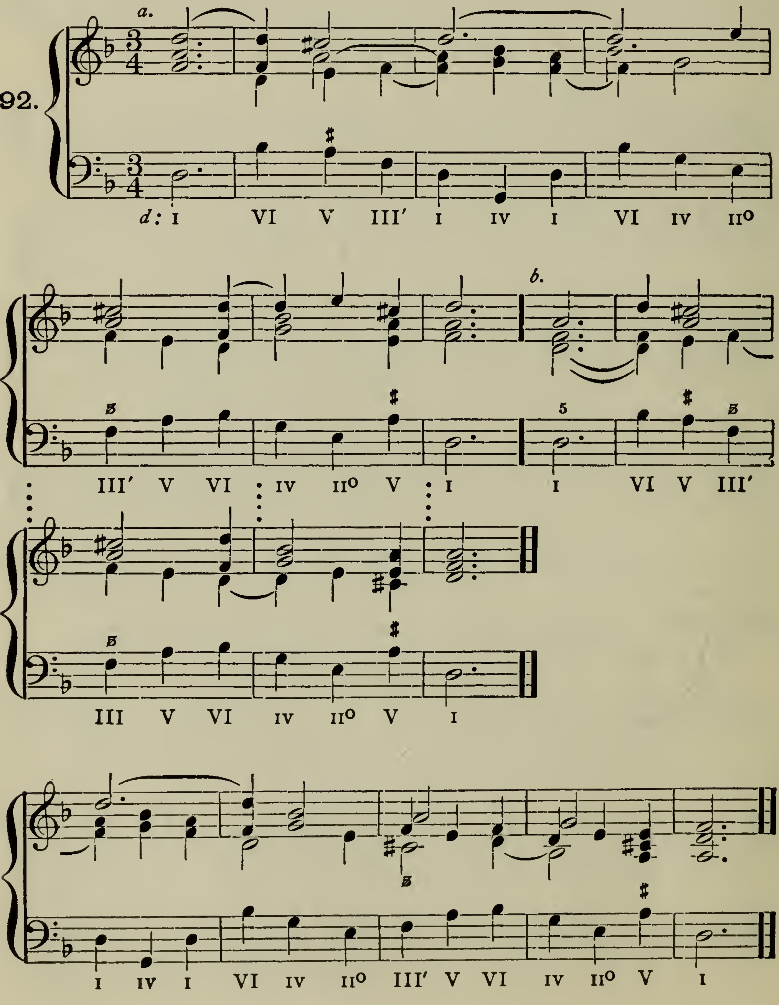
91.



In measure 2 the figure and chromatic sign over the third note *F* might be omitted, and also the sign over the second note *A* in measure 5. In both cases the chromatic raising of the 7th degree of the scale had already been indicated. We will observe, that in these exercises we follow the universal practice of letting each chromatic sign affect its note throughout its measure.

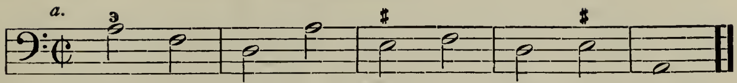
Two workings-out of the bass given at 91 now follow, which the pupil should carefully study and then transpose into *e*♭-minor and *c*♯-minor, before undertaking to work out the basses given at Nos. 93, 94, and 95. (Comp. also App. II, p. 273).

92.


a.
d: I VI V III′ I IV I VI IV IIo
III′ V VI IV IIo V I
b.
I VI V III′
III V VI IV IIo V I
I IV I VI IV IIo III′ V VI IV IIo V I

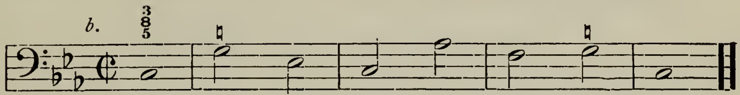
Exercises.

93.



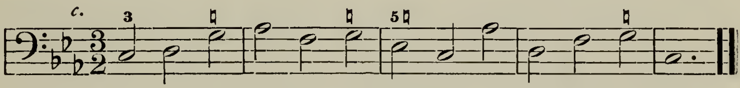
The position of the first soprano note is to be retained when transposing this example into *c*, *b*, *b*♭, *g*♯, *g*, *f*♯ and *f*-minor.

94.



When transposing Ex. 94 into *c*♯ and *d*-minor the soprano should begin on the octave of the bass, and on the fifth in the transposition into *e* and *e*♭-minor.

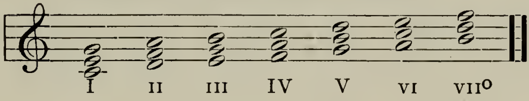
95.



Below is a view of all the triads of the major and minor scales.

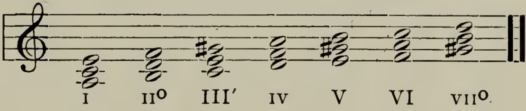
Triads of the Major Scale.

96.



Triads of the Minor Scale.

97.



These triads differ in structure. We found *major* triads on the 1st, 4th, and 5th degrees in major, and on the 5th and 6th in minor; and *minor* triads on the 2nd, 3rd, and 6th degrees in major, and on the 1st and 4th in minor. *Diminished* triads occur on the 7th degree in major and the 2nd and 7th in minor. The *augmented* triad is on the 3rd degree in minor.

CHAPTER VI.

Inversion of the Triads.

§32. The reason that all the exercises heretofore given were more or less constrained, stiff, or actually forced, even when worked out quite correctly, was, on the one hand, because we worked with triads only, and on the other, because we could use these chords only in their *fundamental* position, i. e. the position in which the bass always takes the root of the chord. But the bass may also take the third or fifth of the triad. The position of the chord is then no longer the fundamental one, and we term a chord thus altered in position an

Inverted Chord, or an Inversion.

We call the two practicable inversions of the triad :

a. When the bass takes the third of the triad, a *chord of the sixth*.

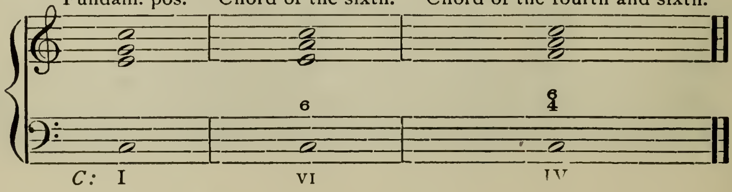
b. When the bass takes the fifth of the triad, a *chord of the fourth and sixth*.

Any triad can be used in the position of a chord of the sixth, or as chord of the fourth and sixth. These are of course no new chords, but merely different forms of one and the same chord.

As we know, the fundamental position of a triad is marked by figures — 3, 5, 8, $\substack{5\\3}$, $\substack{8\\5\\3}$, $\substack{3\\5\\8}$ — only in exceptional cases, e. g. at the beginning of a piece (to indicate exactly the position of the soprano or of all the parts) ; in the midst of a piece such marks have occurred only in the shape of a chromatic sign over the bass note for the third, and of the figure 5 with a chromatic sign for the fifth, where a chromatic alteration of these intervals (in minor) was needful. But we must mark the chord of the sixth with a figure 6, or with $\substack{6\\3}$, or with a 6 and a chromatic sign below it referring to the third above the bass (in case the third requires to be altered chromatically). For the chord of the fourth and sixth we always write $\substack{6\\4}$ over the bass note.

We now proceed to erect on the note *C* (without a figure, or marked with a 3, 5, 8, etc.) the triad of *C* in its fundamental position *C* – *E* – *G*. *C* with a 6 (or $\substack{6\\3}$) over it calls for the chord of the sixth of *that triad*, in the *fundamental* position of which the note *C* is the *third*. *C* marked $\substack{6\\4}$ calls for the chord of the fourth and sixth of that triad, in whose fundamental position *C* is the fifth.

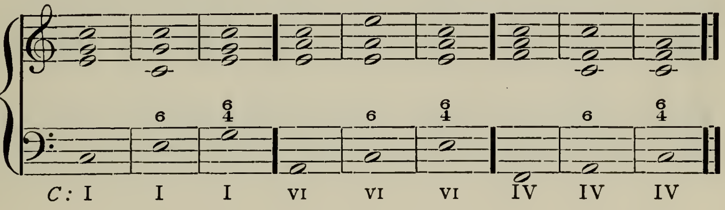
98.



Supposing this example to be in *C*-major, the *C* in the first measure gives us — as the figures under the bass indicate — the triad on the 1st degree; the *C* in the second measure, the chord of the sixth derived from the triad on the 6th degree; and the *C* in the third measure, the chord of the fourth and sixth derived from the triad on the 4th degree.

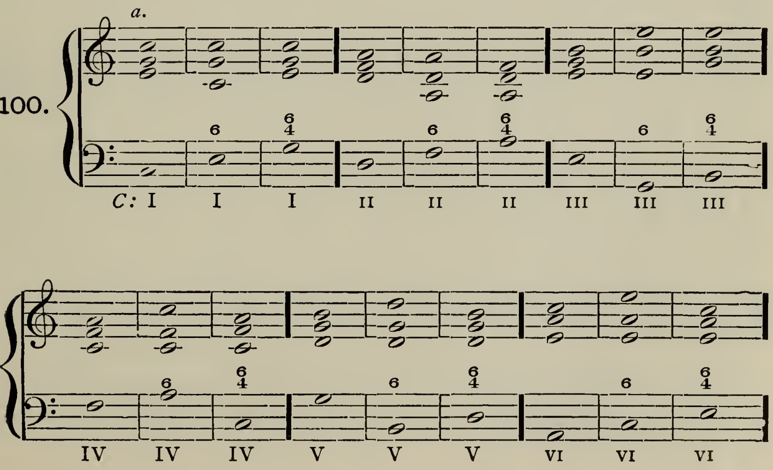
The following example shows all three triads in all positions.

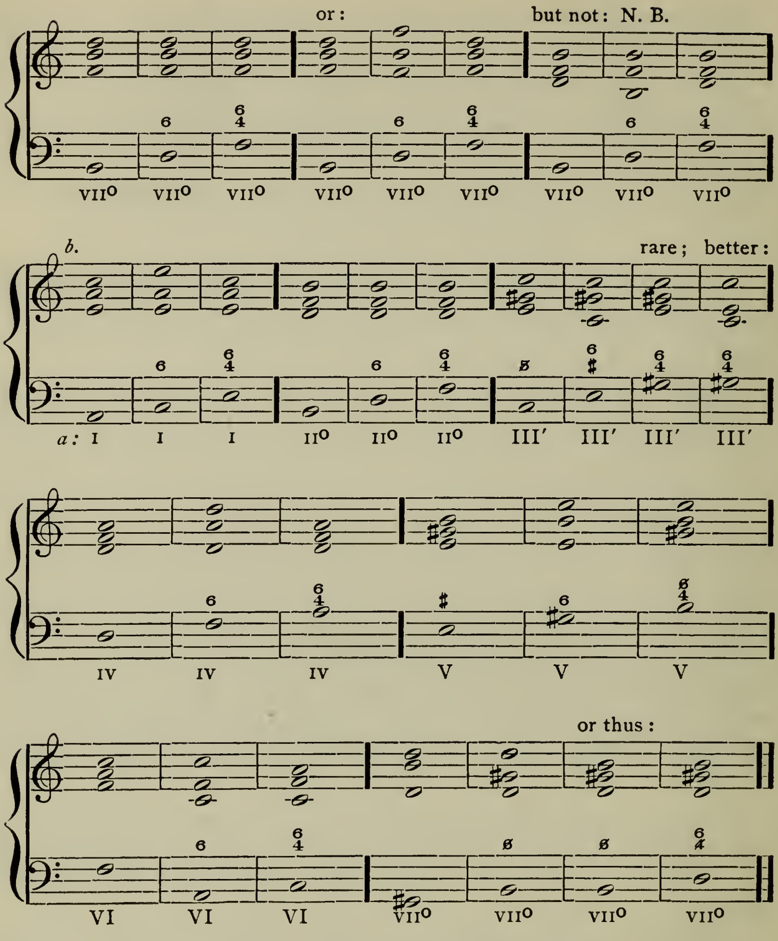
99.



In the chords of the sixth we intentionally neglected to double the bass note, the third of the fundamental chord; this we shall explain later. First of all, the pupil should study attentively the notation of the chords of the sixth in the View given below of the triads on all degrees in major and minor, and in all positions. We have intentionally doubled the bass note, the third of the fundamental chord, only in the chords of the sixth on the 7th degree (in major and minor). An explanation follows directly after the View.

100.

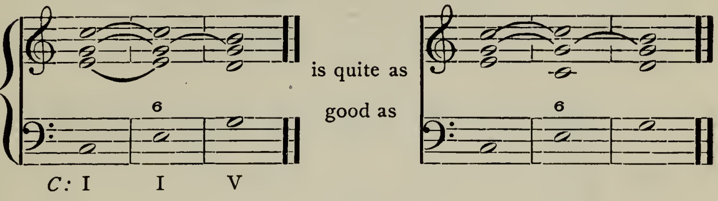



or:
but not: N. B.
6
6 4
VII° VII° VII° VII° VII° VII° VII° VII° VII°
b.
rare; better:
5
6 ♯
a: I I I II° II° II° III′ III′ III′ III′
♯
IV IV IV V V V
or thus:
VI VI VI VII° VII° VII° VII°

§33. The previous remarks (§13, p. 15) on doubling the tones of the triad in its fundamental position also hold good, for the most part, for the inversions of the triad. The third of the major and minor triads, which characterizes the mode, being the most prominently felt interval of the triad, gives us a special reason for not doubling it in the chord of the sixth, because it then lies in the bass, which, as an outer part, renders any interval which it takes peculiarly prominent, much more so than the inner parts. Consequently, we double the third in the chord of the sixth only when we thereby: —

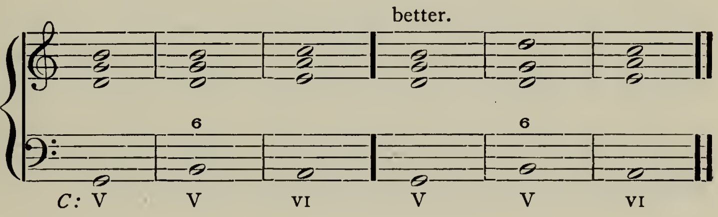
a. Obtain a smoother leading of the inner parts by holding a tone; e. g.

101.



However, we must not forget to keep a sharp lookout for the leading of the leading-note; thus the following progression is not to be recommended:

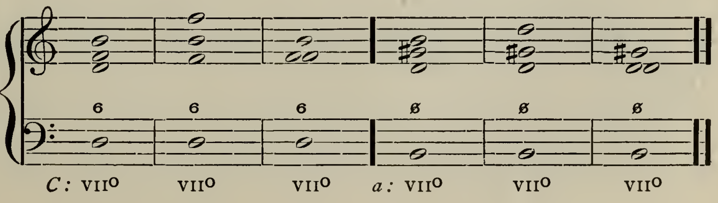
102.



b. For the same reason (progression of leading-note) we must avoid, in chords of the sixth derived from the triads on the 7th degree in major and minor, doubling the root of the fundamental chord (this root being the leading-note of the key). Hence the rule, in four-part writing, that

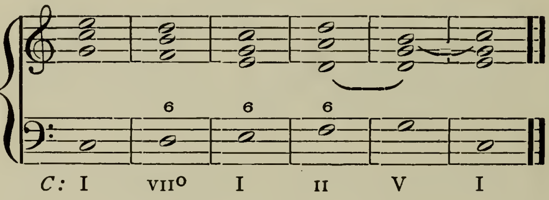
In chords of the sixth derived from the triad on the 7th degree either the bass note (the third of the fundamental chord), or the third above the bass note (fifth of the fundamental chord), is to be doubled; e. g.

103.



c. Besides, the third of the fundamental chord must be doubled when, in the case of two or more successive chords of the sixth, parallel fifths and octaves cannot otherwise be avoided, or when an unconstrained leading of the parts renders the doubling of the third more natural than the doubling of the root.

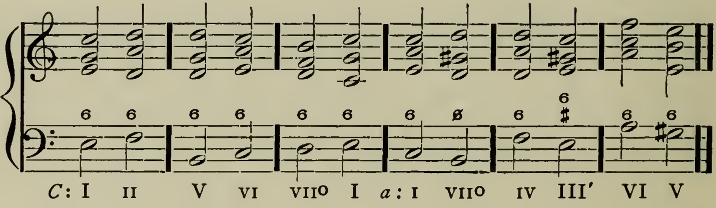
104.



In measures 2 and 3 of Ex. 104 we have in succession the chords of the sixth on the 7th and 1st degrees, and both with doubled third. The chord of the sixth derived from the triad on the 2nd degree (meas. 4) could not double its third. Hence the following rule:

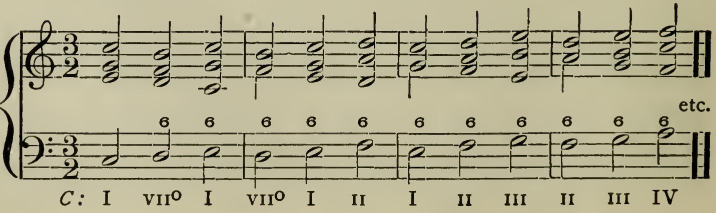
In two or more successive chords of the sixth, progressing by steps, the third of every second chord must generally be doubled, to avoid faulty progressions (parallel fifths and octaves).

105.



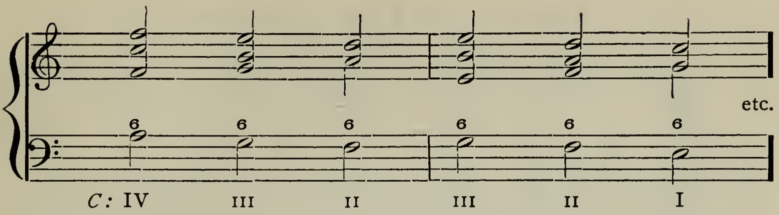
Sequence of Chords of the Sixth.

106.



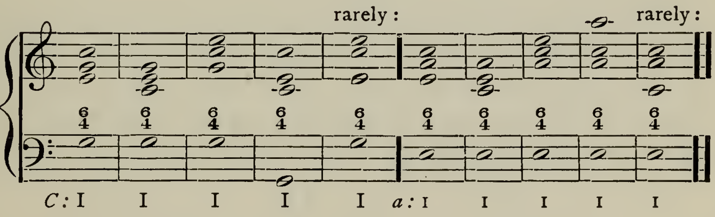
70

McCUNE SCHOOL OF MUSIC & ART



§34. With chords of the fourth and sixth it is usually best to double the bass note, i. e. the fifth in the fundamental chord; though the fourth of the bass (root of the triad) can also be doubled. The sixth of the bass note (third in the fundamental chord) can be doubled only in very rare cases (where the leading of the parts demands it).

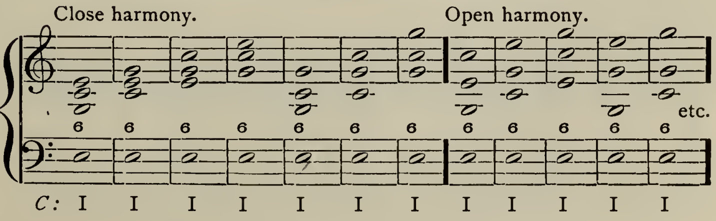
107.



In the case of inversions of the triad the highest parts may be grouped above the bass at pleasure, just as Ex. 37 (§13) shows for the fundamental position of the triad. It follows, that in chords of the sixth, and of the fourth and sixth, the highest parts can assume very different positions with reference to the bass; e. g.

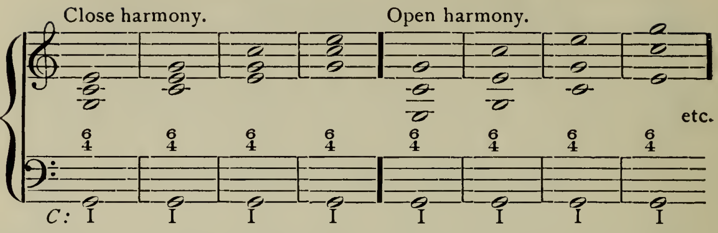
Chord of the Sixth.

108.



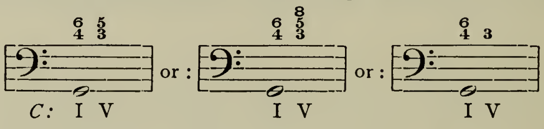
Chord of the Fourth and Sixth.

109.



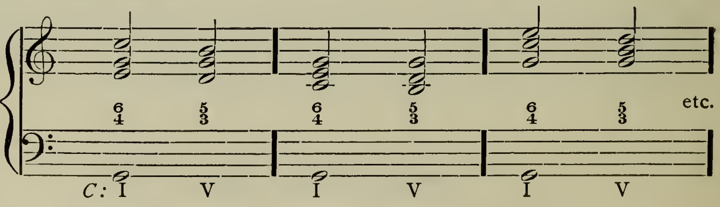
The examples given in the View at 100 (*b*) showed, that the chromatic alteration of an interval in a given chord must be precisely indicated; for the third of the bass by the corresponding sign over the bass note, and for any other interval by a corresponding figure (counting from the bass) and the proper chromatic sign; and that any chromatic sign so indicated must be written before the corresponding note in the higher part.

When two or three figures, or groups ot figures, are set *side by side* above one bass note, this indicates that the chords called for by the figures divide the value of the bass note equally between them. In such cases the fundamental position of the triad must also be marked by the figures 3, 5, 8, $\begin{smallmatrix}5\\3\end{smallmatrix}$, or $\begin{smallmatrix}8\\5\\3\end{smallmatrix}$; thus the following bass

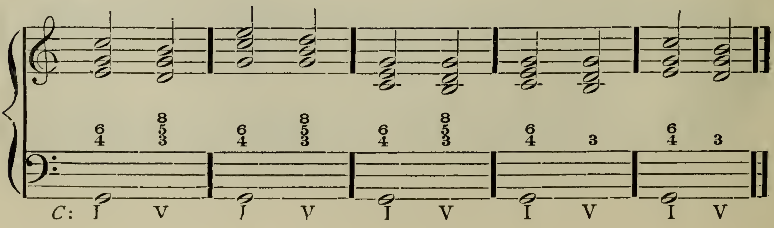


calls for these chords:

110.

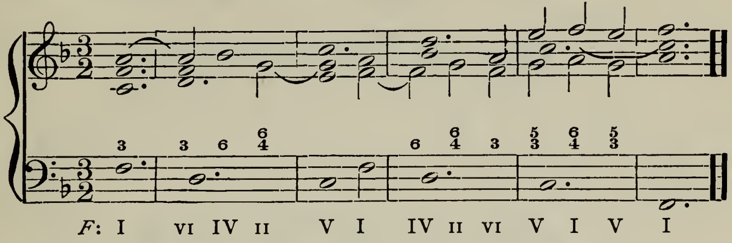


likewise:



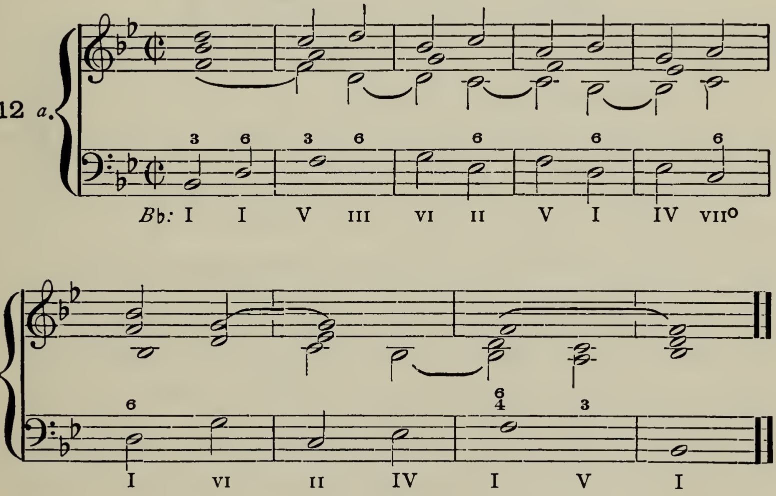
Thus, when the figures 3, 5, 8, $\substack{5\\3}$, $\substack{8\\5\\3}$, occur *over a bass note in the course of an exercise*, they do not refer to the position of the soprano, but simply call for the fundamental position of the triad. Compare the following example:

111.



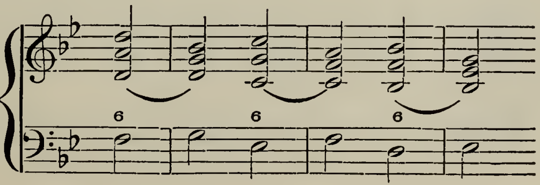
Below we give another example:

112 *a.*



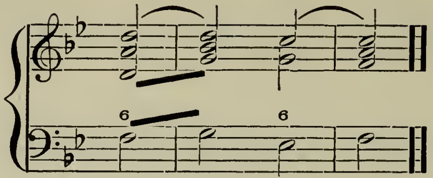
The leading of the parts from meas. 2 to meas. 3, and from meas. 3 to meas. 4, as below:

112 *b.*



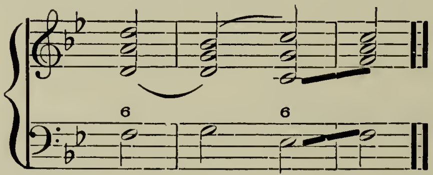
is better than the following:

113.



or thus:

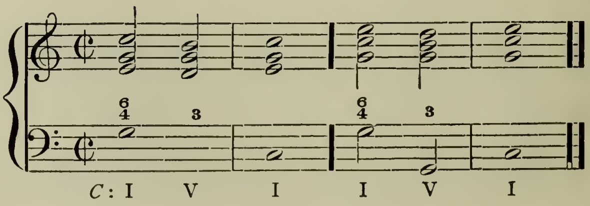
114.



In both the last examples we have *covered octaves* with a *whole-tone step* between the tenor and bass. Although we have nowhere forbidden the pupil to write such parallel octaves between an *outer* and an *inner* part, we advise him to avoid them wherever it can be done properly. Contrary motion, as employed in Ex. 112 in the places under consideration, effects our object, and is likewise far more appropriate to the strict style. Consequently, when the highest parts contain the doubling of the tone which also belongs to the following chord, *it is best in most cases* to retain the said tone in *such a part*, that a progression of the highest parts in *contrary motion* to the bass can be effected.

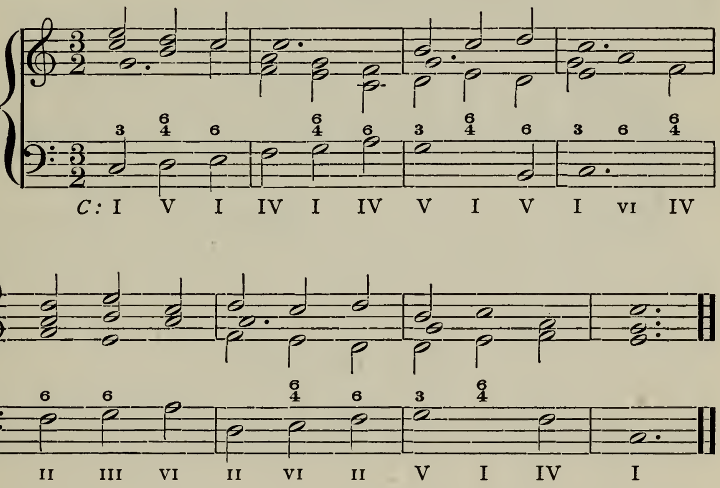
When the chord of the fourth and sixth derived from the tonic triad occurs *at the close* on the *strong* beat, just before the dominant triad in its fundamental position, it is well adapted to confirm the feeling of a complete close.

115.



Such is less the case, when the chord of the fourth and sixth occurs on the *weak* beat, and before a chord other than the dominant triad; even though it be the chord of the fourth and sixth derived from the tonic triad. It is still less the case, when this chord of the fourth and sixth (*on a weak beat*) is the inversion of some other triad than that on the 1st degree.

116.

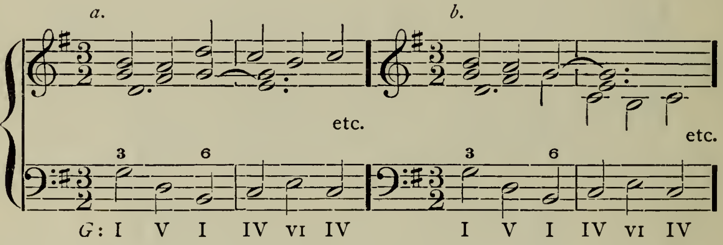


But an accumulation of chords of the fourth and sixth like that in Ex. 116 is disagreeable. Moreover, the introduction of this chord in the midst of a piece in strict writing is dependent on conditions, which the pupil will learn further on. The chord of the fourth and sixth will always be used much less than the fundamental position and first inversion * of the triad. In our exercises the chord of the fourth and sixth will generally occur only towards the close. Roman figures, to indicate the degrees from which the triads in their various positions are derived, should be conscientiously set under the bass notes of the following exercises, and of all succeeding ones, before working them out. By this procedure the pupil will avoid many mistakes, being already sure, before writing out the exercise in notes, with what chords he has to deal either in the fundamental position or some inversion. He must carefully follow the mode of marking with Roman figures observed in the foregoing examples. The basses of the following exercises are so arranged that the pupil may give special attention to a good melodic leading of the soprano. To this end he may occasionally employ the skip of a fourth where it conduces to a more agreeable leading of the soprano, in case it does not disturb the natural and quiet leading of the inner parts. E. g. the leading of the soprano at 117 (*a*) is preferable to that at 117 (*b*).

---

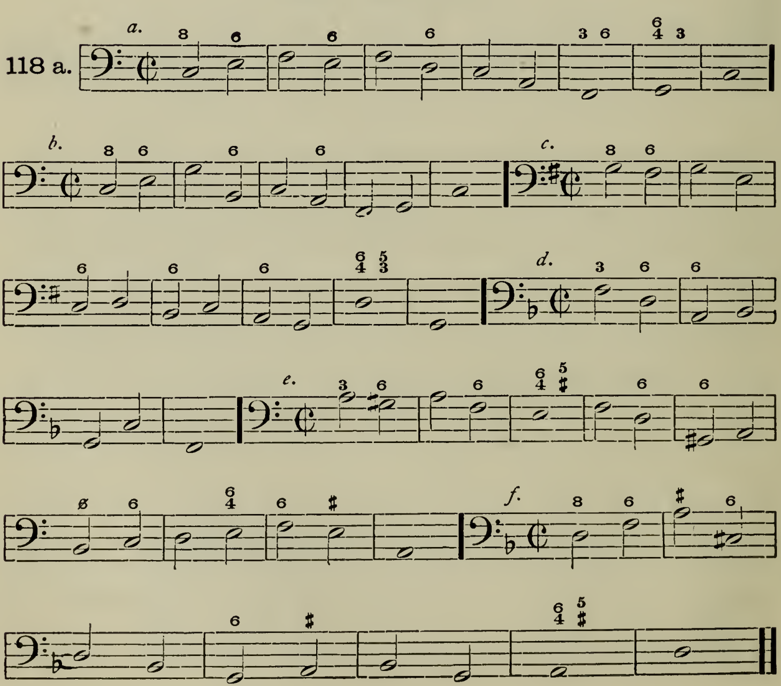
* The chord of the sixth is called the *first* inversion of the triad, and that of the fourth and sixth its *second* inversion. TRANSL.

117.



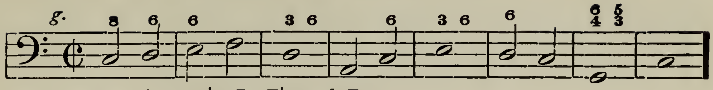
Easy Exercises.

118 a.



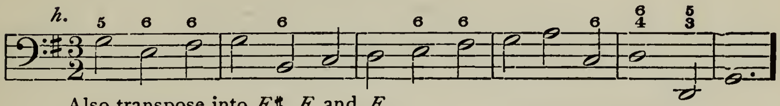
More Difficult Exercises.

118 *b.* *g.*



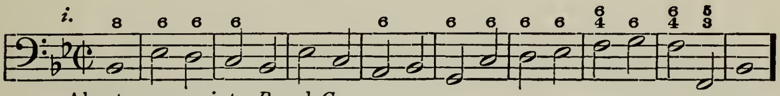
Also transpose into *D*♭, *D*, *E*♭, and *E*.

h.



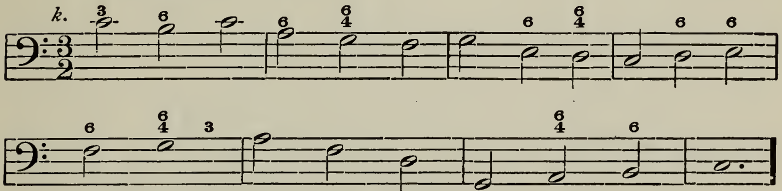
Also transpose into *F*♯, *F*, and *E*.

i.



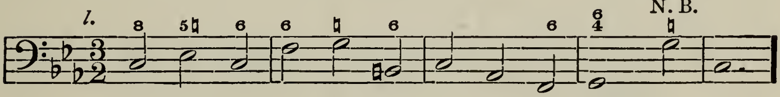
Also transpose into *B* and *C*.

k.



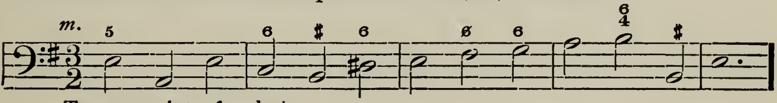
Also transpose into *B*, *B*♭, *A*, *A*♭, and *G*.

l.



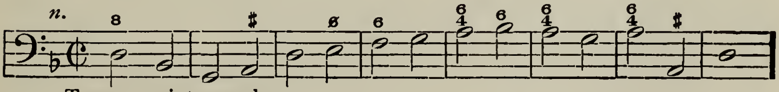
The ♮ at N. B. suffices in this case to indicate the dominant triad with raised third. The full figuring of this last *G* would be $\overset{5}{\natural}$ or $\begin{smallmatrix}8\\5\\\natural\end{smallmatrix}$. This Exercise is to be transposed into *c*♯, *d*, *e*♭, and *e*.

m.



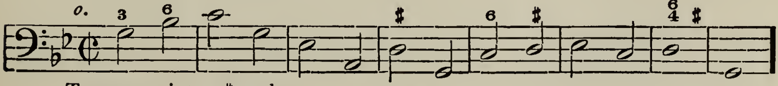
Transpose into *f* and *e*♭.

n.



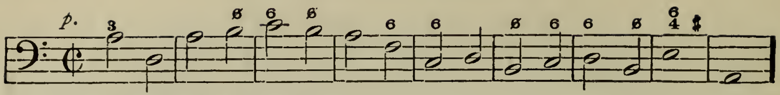
Transpose into *e* and *c*♯.

o.



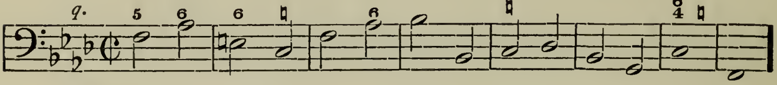
Transpose into *g*♯ and *a*.

p.



Transpose into *g*♯, *g*, and *f*♯.

q.

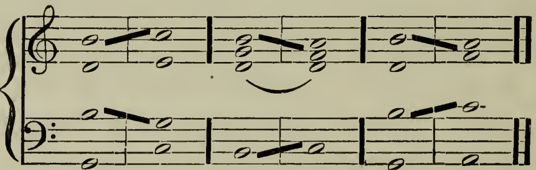


Transpose into *f*♯ and *g*.

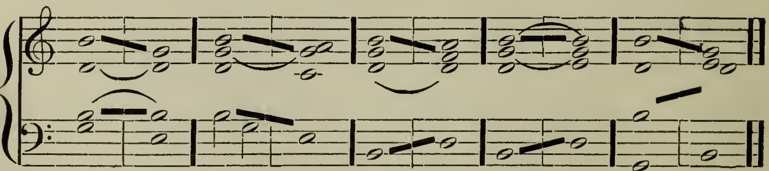
In working out these exercises the pupil will sometimes *be obliged* to double the third of the triad, both in its fundamental position and as a chord of the sixth; he need not fear to do so wherever a correct leading of the parts requires it; but when the *third* is the *leading-note*, it must never be doubled.*

---

*The objection usually raised against doubling the leading-note is, that it is melodically attracted to the tonic, and a progression of both leading-notes to the tonic would produce parallel octaves. But as already observed in my Manual of Counterpoint (published by G. Schirmer, 1887), "the requirements of this melodic attraction are . . . . amply satisfied when *one* of the parts having the doubled third progresses to the tonic:



or even if *neither* of them progress to the tonic:

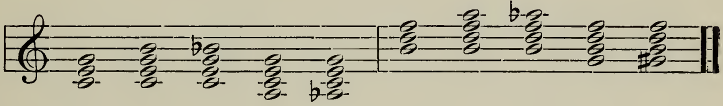


in other words, there is no real reason why the dominant third should not be doubled like any other major third." Of course, some of the above examples are somewhat advanced for beginners. Transl.

CHAPTER VII.

Chords of the Seventh.

§35. By adding a third to a triad, we get a Chord of the Seventh; i. e. a chord in which the interval from the root to its highest note is a seventh. According as we add a major or a minor third above the fifth of the triad, or below its root, we obtain different chords of the seventh; e. g.

119.


These are all *dissonant*, *dependent* chords. They can never appear alone, but always only in connection with other chords. The seventh, as the dissonant interval, must be *prepared* in most of these chords; and all chords of the seventh must be *resolved*.

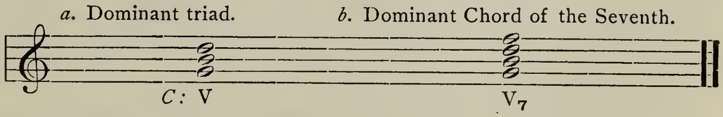
We begin with the most important chord of the seventh, the

Dominant Chord of the Seventh,

also called "principal" chord of the seventh, or, for short, "dominant chord."

The seventh in this most frequently used chord of the seventh needs no preparation; for the present, therefore, we shall not explain what *preparation* means, or how it is to be performed.

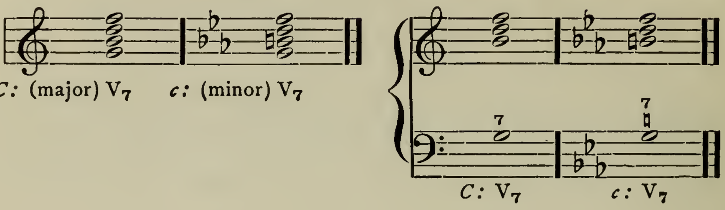
The dominant chord of the seventh is formed by the addition of a minor third above the fifth of the dominant triad.

120.


As Ex. 120 (*b*) shows, we indicate this triad with V_7.

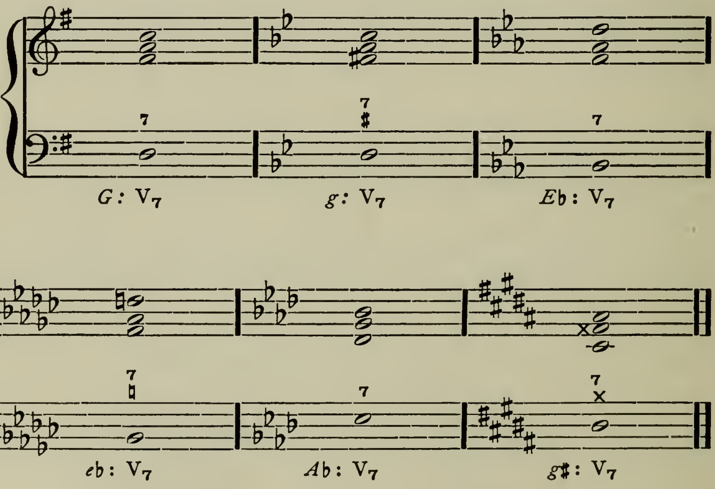
The dominant triad being just the same in major and minor, the chord of the dominant seventh is also formed *alike in both modes* by the addition of a *minor* third above the fifth of the *major* dominant triad, this minor third then forming the interval of a *minor* seventh with the root of the chord.

121.



A complete *figuring* of the bass is obtained by writing out each interval in the chord of the seventh, as follows: $\begin{smallmatrix}7\\5\\3\end{smallmatrix}$. This will seldom be necessary; but it may frequently happen that such a chord has to be indicated by $\begin{smallmatrix}7\\5\end{smallmatrix}$ or $\begin{smallmatrix}7\\3\end{smallmatrix}$. For the dominant chord of the seventh in *major* it generally suffices to write a 7 over the bass note; in *minor* the chromatic sign required for raising the third of the chord (leading-note of the scale) must be added below the 7.

122.

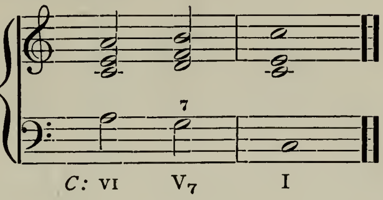


We hardly need remark, that, with reference to their position above the bass, the intervals of the chord of the seventh can be distributed at pleasure among the three highest parts, as in the case of the triad and its inversions. In the following pages this point will not be alluded to again.

Natural Resolution of the Dominant Chord of the Seventh.

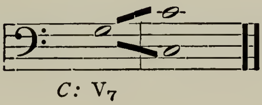
§36. Though the dominant chord of the seventh needs no preparation, and can enter freely, e. g.

123.



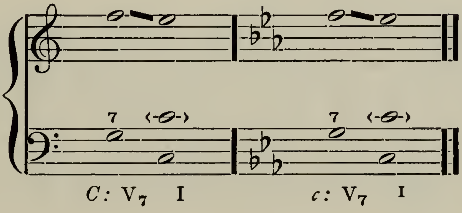
it must nevertheless be *resolved.* Its natural resolution is to the tonic triad, and is effected thus: The *bass* (the dominant of the scale) is led upwards by the skip of a fourth, or downwards by the skip of a fifth, to the tonic;

124 *a.*



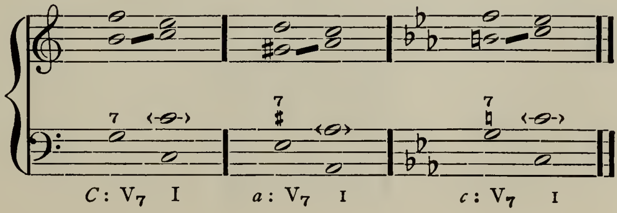
the *seventh* is led downwards by a semitone in major, and by a whole tone in minor;

124 *b.*



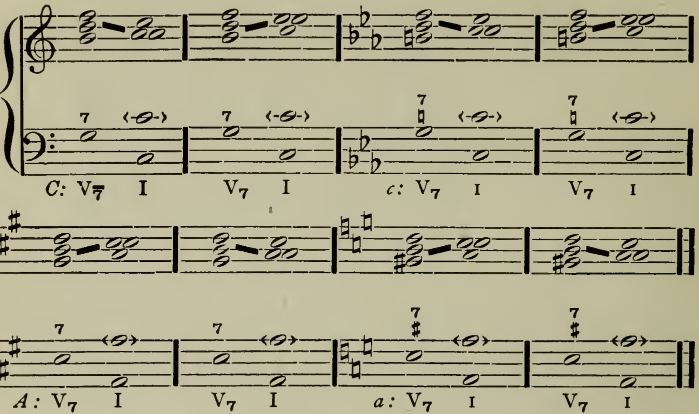
the *third*, which is the leading-note, progresses upwards by a semitone to the octave of the tonic;

124 *c.*



while the *fifth* may be led either a step upwards or a step downwards:

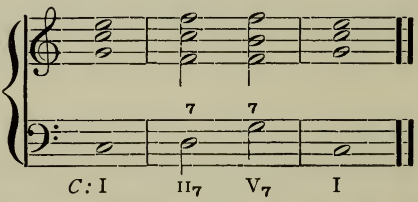
124 *d.*



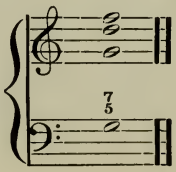
In this natural resolution of the dominant chord of the seventh the tonic triad appears incomplete; its fifth is lacking. In any triad or chord of the seventh the *fifth* may be dropped, and some other interval doubled to replace it. In the case of triads, as Ex. 124 shows, this doubled interval may be either the *root* or the *third;* in fact, *any* interval of the triad may be doubled. In chords of the seventh *only the root can*, in the great majority of cases, *be doubled* in four-part composition.*

---

*With chords of the seventh exceptional cases occur, the third, and even the seventh, being sometimes doubled in four-part writing. This may happen, in particular, when several chords of the seventh follow each other, as the next example shows.

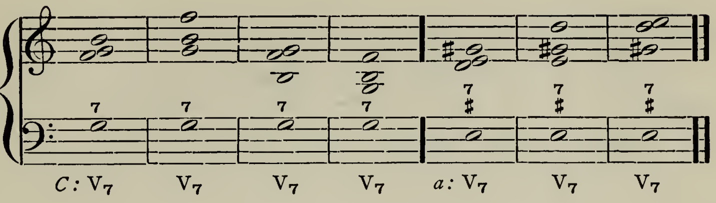


Even the third may sometimes be dropped from the chord of the seventh, though very rarely.



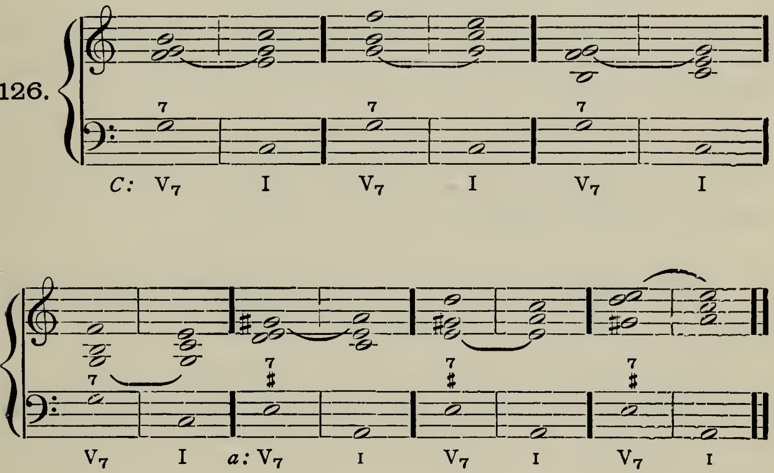
The chord then assumes the following forms:

125.



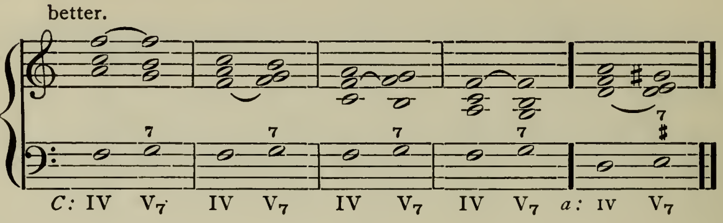
On resolving such chords of the seventh the *root*, which is doubled in one of the higher parts, is held in the same part, thus becoming the *fifth* of the tonic triad. The resolution of the chords at 125 is given below.

126.

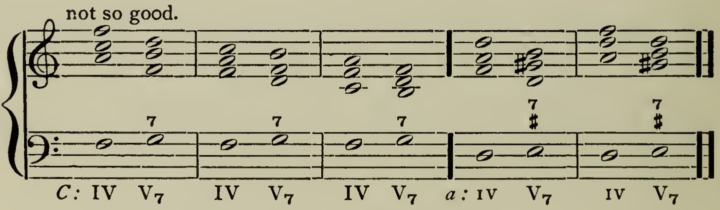

7 7 7
C: V$_7$ I V$_7$ I V$_7$ I
7 7 ♯ 7 ♯ 7 ♯
V$_7$ I a: V$_7$ I V$_7$ I V$_7$ I

Attention to the correct leading of the parts often obliges us even to write a chord of the seventh which has no fifth with a doubled root; thus the progression of the triad on the fourth degree, in its fundamental position, to the dominant chord of the seventh in its fundamental position, is best effected by dropping the fifth of the latter chord and doubling its root instead. The progressions between these chords are far better at 127 than at 128, where we lead the highest parts in contrary motion to the bass by a skip, in order to avoid parallel fifths.

127.



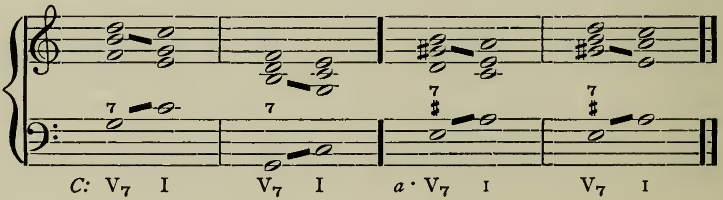
128.



There is one more way in which we can obtain the full triad on resolving the chord of the seventh, though only under certain conditions.

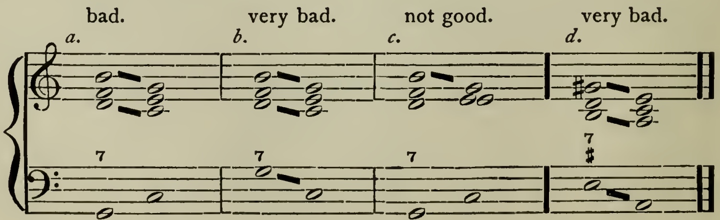
When the third of the chord of the seventh is in an inner part, and the root lying in the bass makes a skip of a fourth upward on resolution, the third may be allowed to skip down by a third in contrary motion to the bass.

129.



This must not occur, however, when the third of the chord of the seventh is in the soprano.

130.



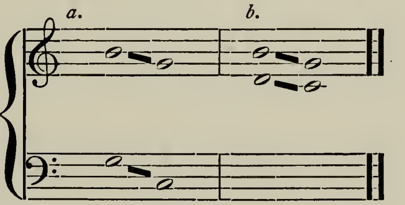
Above (§23) we have already remarked on the natural tendency of the leading-note towards the octave of the tonic, in case the next chord contains the latter tone. This is most strongly felt in progressions from the dominant chord to that of the tonic. But this upward tendency of the leading-note is less striking in the inner parts, because the leading-note is then partly covered by the outer parts, and is consequently less sharply prominent. The progression of the dominant chord (whether as triad or chord of the seventh) to the tonic triad should, however, in no case be effected by letting the root and third of the dominant chord *skip down together* to the root and fifth respectively of the tonic triad.

The progression of the third and fifth of the chord of the seventh to the fifth and root of the triad, as in Ex. 130 (*b*) and (*d*), is therefore doubly incorrect. In all these cases there arise

Covered Parallel Fifths.

These occur when two parts progress, from different intervals and in parallel motion, to a perfect fifth (or twelfth); e. g.

131.

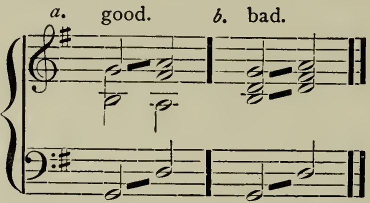


Such covered parallel fifths (also called *hidden*, *concealed*, or *consecutive* fifths) are to be carefully avoided as incorrect progressions

1. *Always* when, as at 131 (*a*), both parts *skip* to the perfect fifth;
2. *Generally* when, as at 131 (*b*), the higher part progresses by a *skip*, and the lower by a *step*, to the perfect fifth.

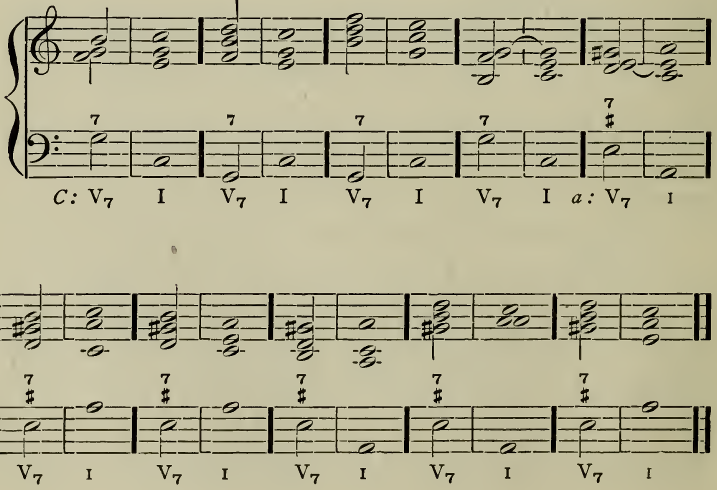
Other covered fifths, such as those in which the *higher* part progresses *by a step*, and the *lower by a skip*, may be permitted for the present without reserve, provided that they are accompanied by no other faulty leading. For instance, the progression at 132(*a*) is entirely correct, whereas 132 (*b*) is utterly wrong on account of the covered parallel octaves in two skipping parts, which accompany the covered fifths, and by reason of parallel motion in all the parts. Compare on this head §21 and §16.

132.



§37. After all we have said, it is not a matter for surprise that, in practical four-part writing, we meet with the dominant chord of the seventh oftener *without its fifth, and with doubled root*, than *with* its fifth. Indeed, it is clear that the chord of the seventh, with its four tones, can better spare its fifth than the triad, which contains but three. In closing this chapter we may add, that the natural resolution of the dominant chord of the seventh to the tonic triad is called a Cadence. When, in this resolution, a dominant chord of the seventh on the *weak* beat is followed by the tonic triad on a *strong* beat, this progression forms a Perfect Cadence.

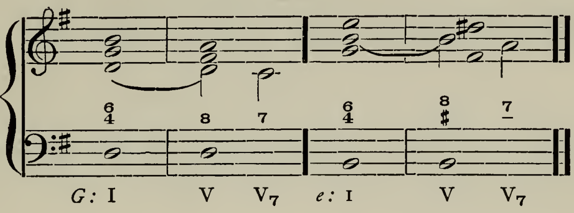
133.



If we desire to let the dominant chord of the seventh follow the dominant triad, we figure the chords as follows:

1. When the octave of the root of the dominant triad is to progress to the seventh by a step, with 8 7 over the bass:

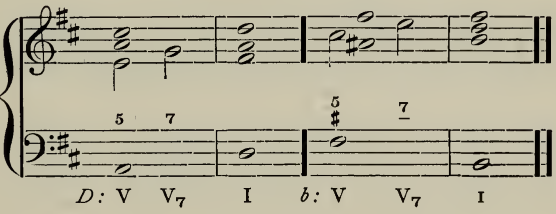
134.



The line under the 7 means, that the chromatic sign continues to affect the third of the chord of the seventh. Within one and the same measure, however, the line may be omitted.

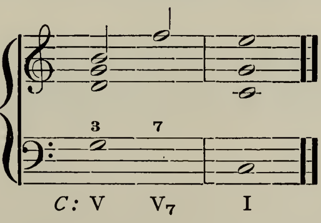
2. When the fifth is to skip to the seventh, with 5 7:

135 *a.*

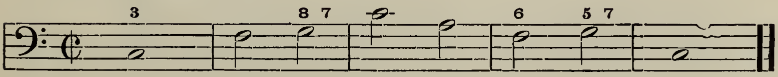


Occasionally even the third may skip to the seventh:

135 *b.*

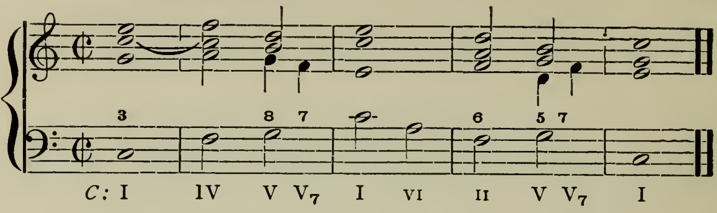


The following bass



should therefore be worked out thus :

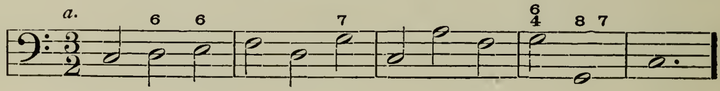
136.

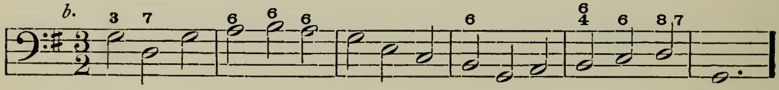


The examples given in Appendix I, p. 247, bearing on this point, should first be analyzed and accurately figured, as No. 136 shows. Also comp. App. II, p. 275.

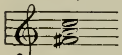
Exercises.

137.

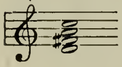


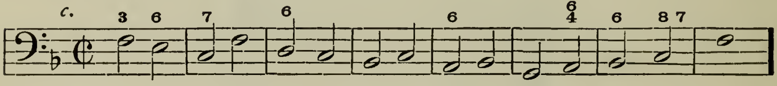


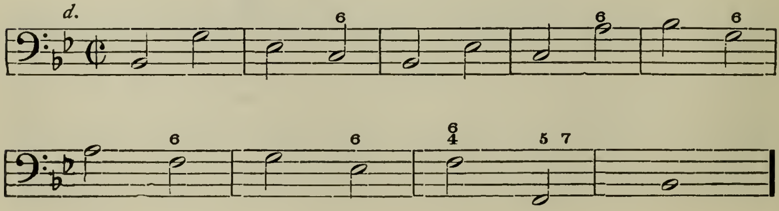
N. B. In this exercise the pupil must take care not to treat the fifth of the triad on the 7th degree as if it were the seventh in the dominant chord of the seventh, and lead the tone *C* downwards accordingly. The fifth of the triad


can be led *up* just as well as *down.*

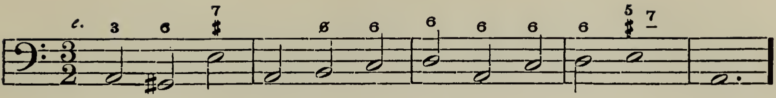
(In the above example it is better to lead it up.) The seventh of the chord


must, however, be led downwards.

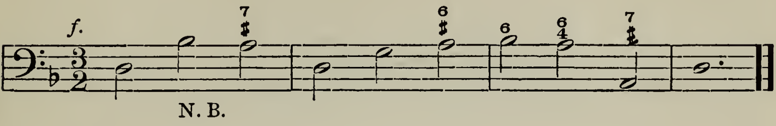




e.

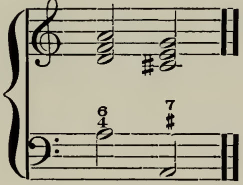


f.



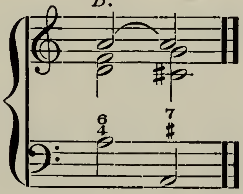
N. B. In progressions between the triad on the 6th degree in minor and the dominant chord of the seventh, the former chord *must* likewise *double its third*, to avoid incorrect progression to the dominant chord of the seventh (compare §28). In the measure before the last, the downward parallel motion in all the parts is not good :

A.

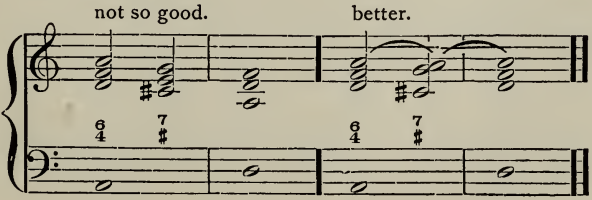


it is better to write the dominant chord of the seventh without its fifth :

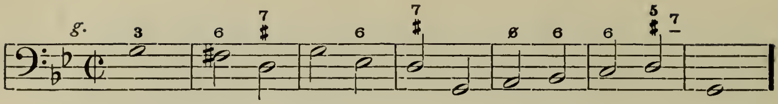
B.



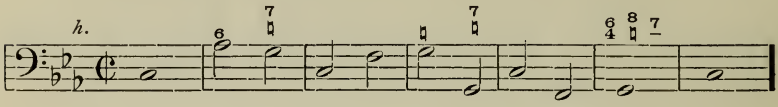
The leading of the parts at *B* would also be preferable if the tone *a* were held in the bass; because the simultaneous downward progression of the three highest parts from a perfect to a diminished fifth has an unpleasant effect without contrary motion in the bass.



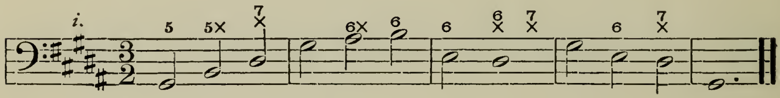
g.



h.



i.



In the last exercise the chromatic raising of the seventh degree is indicated throughout by a double-sharp (×); though a stroke through the figures 5 and 6 (5̸ 6̸) would have sufficed. But for the third of the dominant chord of the seventh a double-sharp had to be set, because in this case the figure 3 could be dropped.

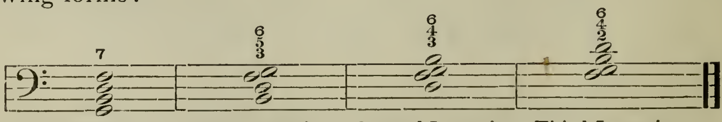
The above, and all following, exercises in this book are to be transposed into other keys, and worked out in them.

CHAPTER VIII.

The Inversions of the Dominant Chord of the Seventh and Their Natural Resolutions.

§38. Precisely as we write the triad in three forms — in its fundamental position, as chord of the sixth, and as chord of the fourth and sixth, — can we write and employ each chord of the seventh in four forms, corresponding to the number of its intervals. These are the fundamental position and three inversions. On examining, to begin with, the inversions of the dominant chord of the seventh, the fundamental position of which we have just learned, we find the following forms:

138.



Fundamental position. First Inversion. Second Inversion. Third Inversion.

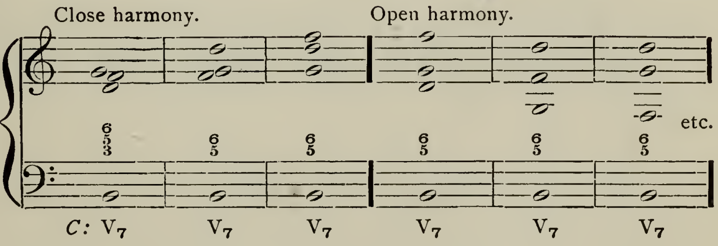
In the first inversion the bass takes the third of the original chord, and the other tones of the inversion bear to this new bass tone the relation of a third, fifth, and sixth respectively. We therefore call it the chord of the third, fifth, and sixth, or chord of the fifth and sixth for short, and indicate it by the figures $\substack{6\\5\\3}$ or $\substack{6\\5}$ over the bass note.

In the second inversion the bass takes the fifth of the original chord; the other tones of the inversion bear to this new bass tone the relation of the third, fourth, and sixth, respectively. This chord is called the chord of the third, fourth, and sixth, or, for short, the chord of the third and fourth, and is indicated by the figures $\substack{6\\4\\3}$ or $\substack{4\\3}$ over the bass note.

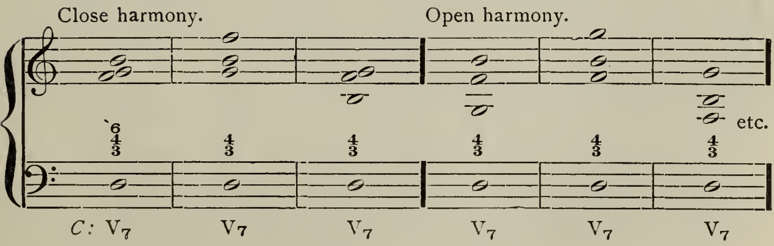
In the third inversion the bass takes the seventh of the original chord; the other tones of the inversion bear to this new bass the relation of the second, fourth, and sixth, respectively. It is called the chord of the second, fourth, and sixth, or, for short, the chord of the second; it may be figured either in full with $\substack{6\\4\\2}$, or with $\substack{4\\2}$, or with 2 alone.

Chord of the Fifth and Sixth.

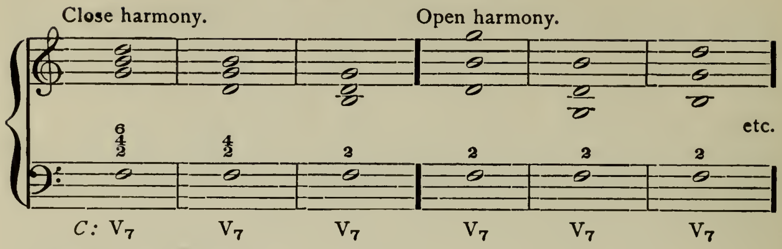
139.



Chord of the Third and Fourth.



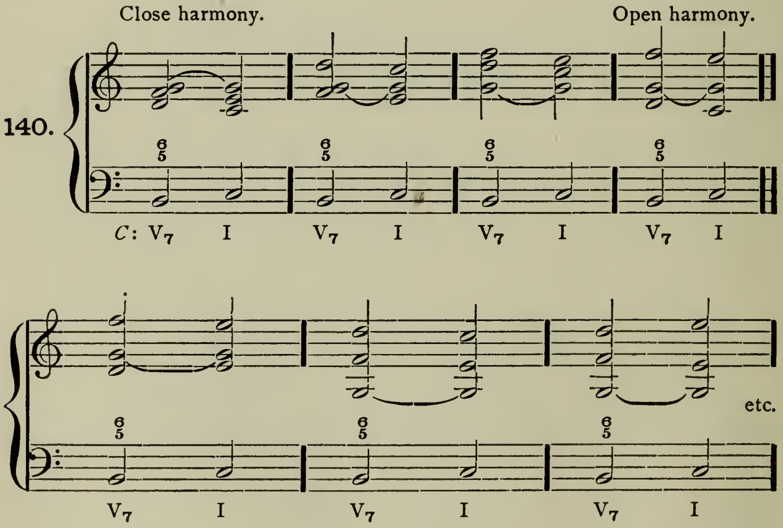
Chord of the Second.



Compare close of §35.

The natural resolution of these inversions of the dominant chord of the seventh to the tonic triad is such, that the root of the original chord *is held in the same part;* all the other intervals progress, in the resolution of the inversions, to the tones of the tonic triad in *precisely the same manner* that they did in the resolutions from the fundamental position of the dominant chord of the seventh. It follows, that the first inversion of the dominant chord of the seventh, the chord of the fifth and sixth, in which the third of the chord lies in the bass, *must* resolve to the fundamental position of the tonic triad.

140.

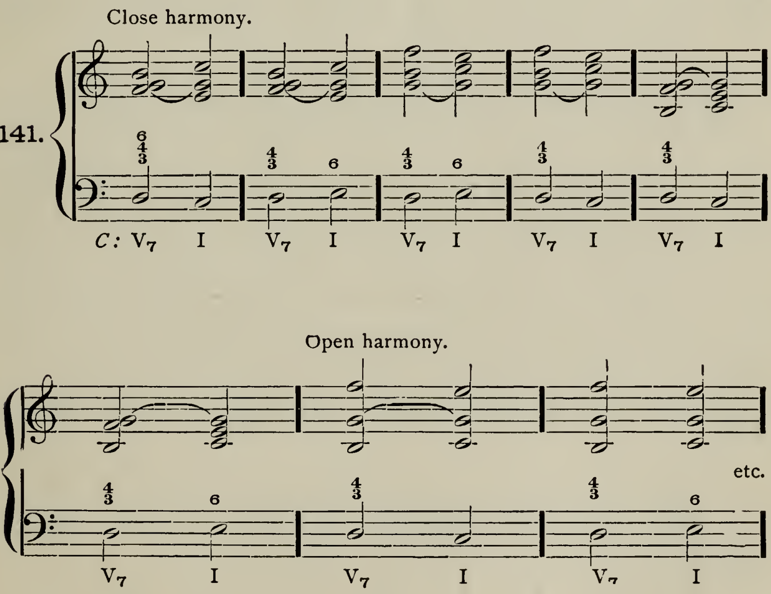


The pupil will perceive, that in all these resolutions the root (*G*) of the original chord is held in the same part. The bass note *B* of the chord of the fifth and sixth goes to *C*. The seventh (*F*) of the original chord progresses one step downwards; while the fifth, *D*, may be led either a step downwards to *C*, or a step upwards to *E*.

For this reason — that the fifth in the dominant chord of the seventh can be led by a step either *upwards* or *downwards* — the second inversion of that chord, the chord of the third, fourth, and sixth, admits of a double resolution. It can resolve either to the fundamental position of the tonic triad, or to the chord of the sixth derived from the latter, according as the bass is led up or down by a step. The third in the *chord of the sixth* derived from the tonic triad *must* then be doubled.

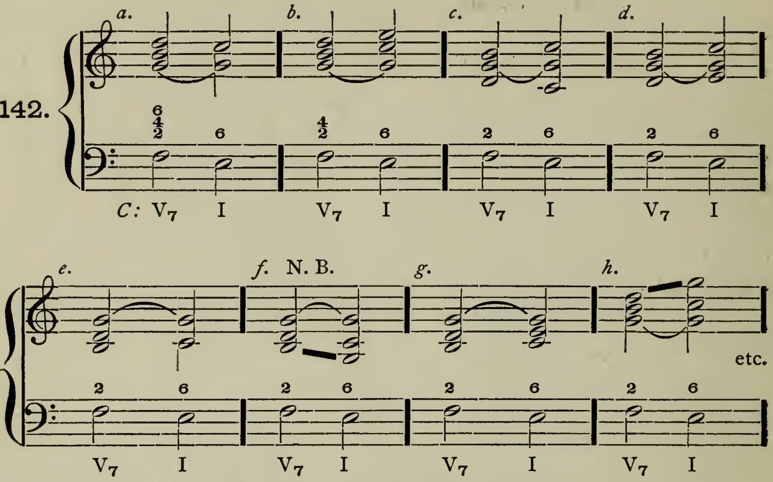
Let us examine the resolutions of the chord of the third and fourth given below.

141.



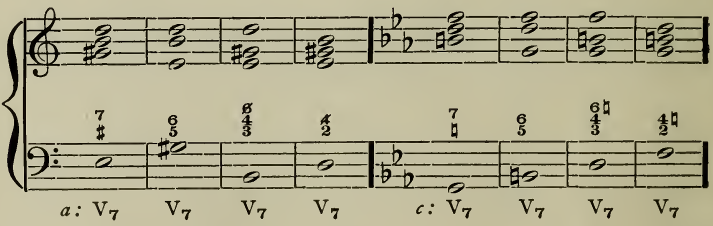
The third inversion of the dominant chord of the seventh, the chord of the second, in which the bass has the seventh of the original chord, must always resolve to the chord of the sixth derived from the tonic triad, because the seventh must be led down by a step. A few such progressions are given below. (Comp. also App. II, p. 275).

142.

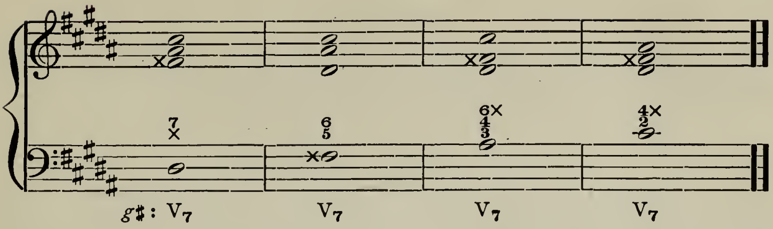


In minor the chord of the third, fourth, and sixth must always be figured in full with $\begin{smallmatrix}6\\4\\3\end{smallmatrix}$, and the chord of the second with at least $\begin{smallmatrix}4\\2\end{smallmatrix}$ over the bass note; because the sixth of the former and the fourth of the latter require, as the seventh degree of the minor scale, a sign that they are chromatically raised. Consequently, though formed *exactly alike* in major and minor both in its fundamental position and its inversions, the dominant chord of the seventh requires a more detailed figuring in minor, as we have already seen in its fundamental position. Example 143, on the dominant chord of the seventh and its inversions in minor, will furnish a sufficient illustration.

143.

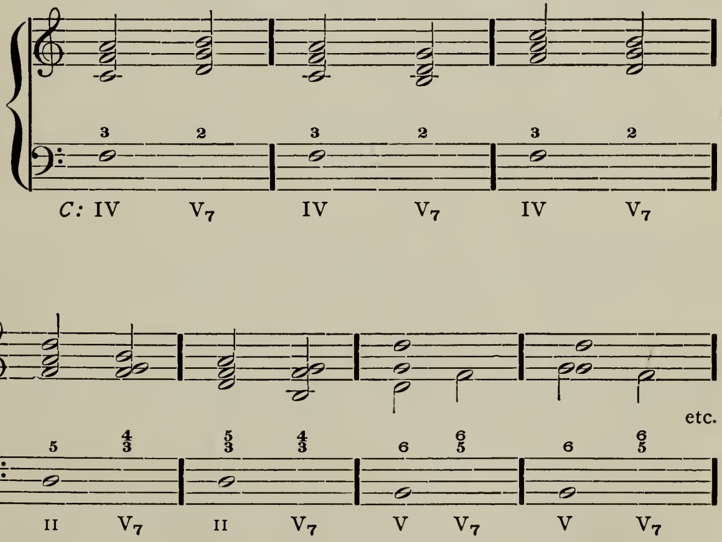


N. B. In this case the leading-note, even though in an inner part, can skip *downwards*, because parallel fifths do not arise from this leading.



In the following exercises, the triad is also specially indicated by 3 or $\begin{smallmatrix}5\\3\end{smallmatrix}$ whenever a second chord follows to the same bass note; thus the figures 3 2 side by side call for the triad of the bass note and the chord of the second on the same note; 3 $\begin{smallmatrix}4\\3\end{smallmatrix}$ or 5 $\begin{smallmatrix}4\\3\end{smallmatrix}$ for triad, and chord of the third and fourth; 6 $\begin{smallmatrix}6\\5\end{smallmatrix}$ for the chord of the sixth followed by that of the fifth and sixth; as shown in Ex. 144.

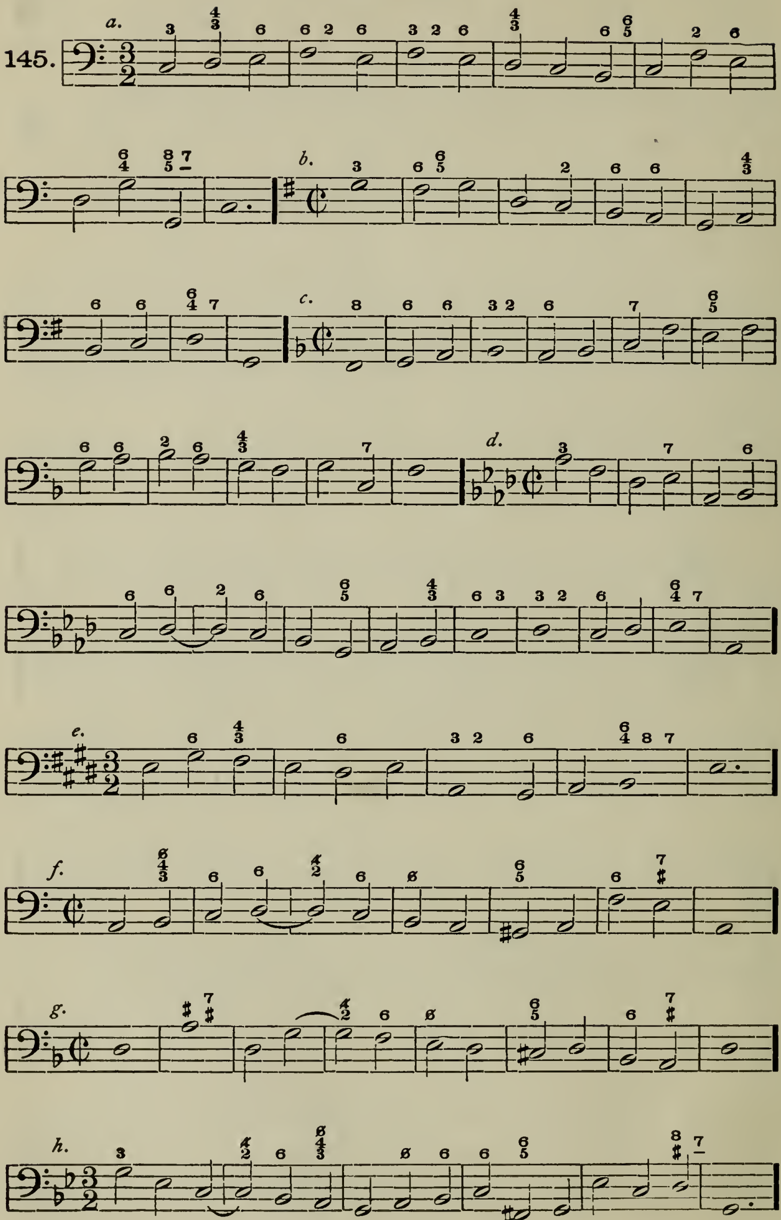
144.



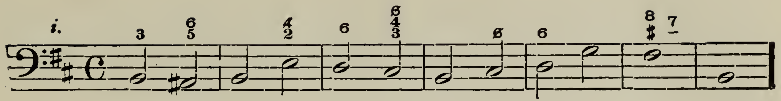
Before working out the exercises, the examples in Appendix I, p. 248, bearing on this subject should be carefully analyzed, and accurately figured both above and below the bass; the same obtains of all succeeding exercises.

Exercises.

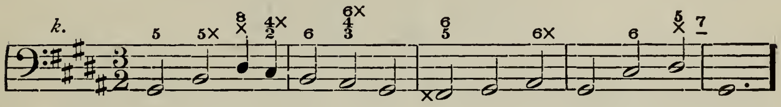
145.



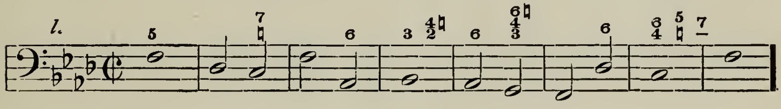
i.



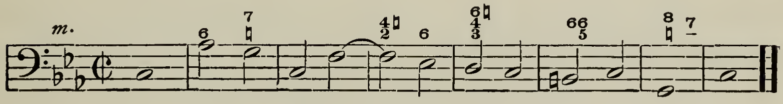
k.



l.



m.

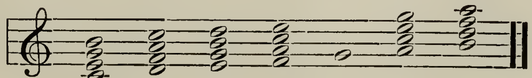


CHAPTER IX.

The Secondary Chords of the Seventh in Major, and Their Natural Resolutions.

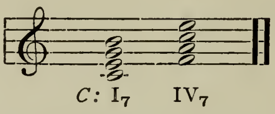
§39. Besides the dominant chord of the seventh, we find secondary chords of the seventh on the remaining degrees of the major and minor scales. They are formed by adding to the fifth of each triad the third above it belonging to the same key. We shall first take up the secondary chords of the seventh in major, writing them out in *C*-major as below.

146.

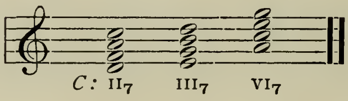


C: I_7 II_7 III_7 IV_7 V VI_7 VII^o_7

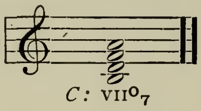
They are classed, according to their construction, as chords of the seventh with major triad and major seventh, on the first and fourth degrees of the scale:



as chords of the seventh with minor triad and minor seventh, on the second, third, and sixth degrees of the scale:

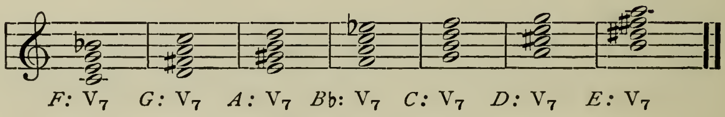


and as the chord of the seventh with diminished triad and minor seventh on the seventh degree:



We may observe here, that major triads with a minor seventh will always be dominant chords of the seventh; e. g.

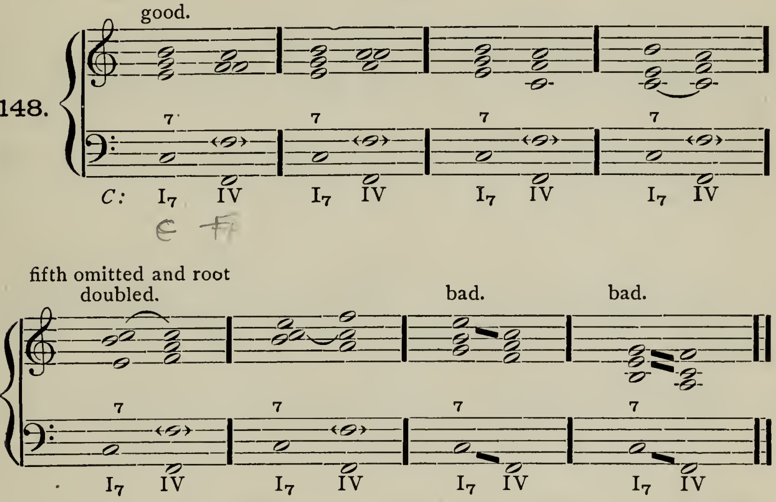
147.



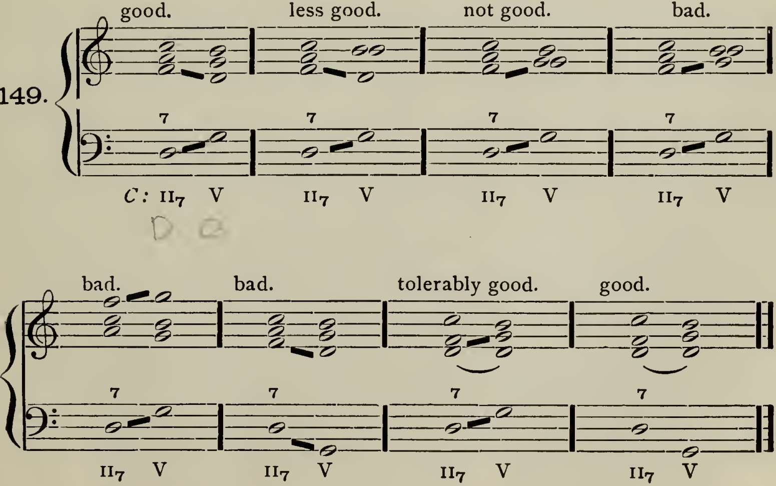
The natural resolution of the secondary chords of the seventh in major is effected in all cases — excepting that on the 7th degree, which admits of a double resolution — in precisely the same way as that of the dominant chord of the seventh. The root skips upward by a fourth or downward by a fifth; the seventh, whether major or minor, progresses downward by a step. The third goes up a step, in case it is not preferable to let it skip down a third in opposition to the *ascending* bass; the fifth, in the secondary chords of the seventh on the 1st, 2nd, 3rd, 4th, and 6th degrees, may progress in resolving either a step downwards or a step upwards, at pleasure. It is only in the resolution of the secondary chord of the seventh on the 7th degree to the tonic triad, from the *fundamental* position, that the fifth must always be led *downward* a step. All these natural resolutions of secondary chords of the seventh are called *cadence-like resolutions*.

To clearly illustrate the above we append a View of the secondary chords of the seventh in major, with their cadence-like (natural) resolutions.

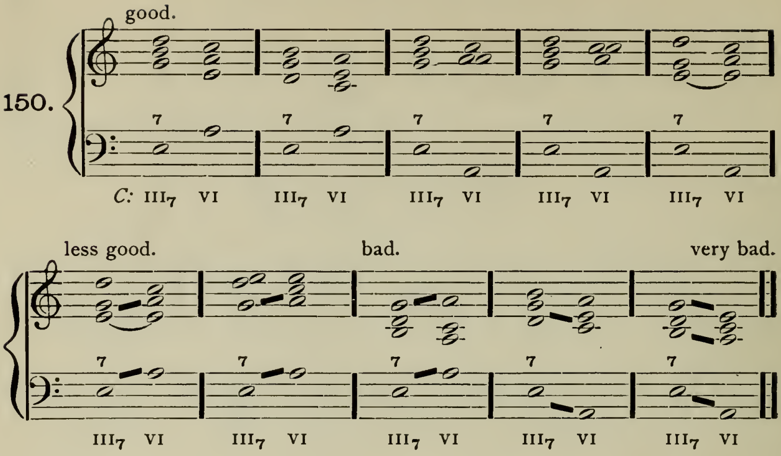
148.



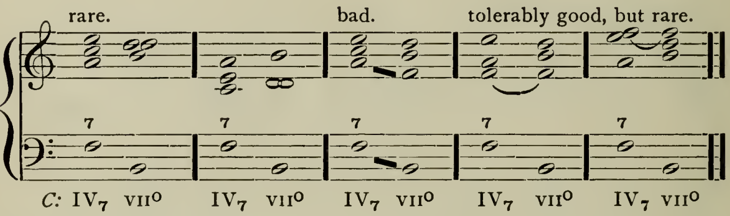
149.



150.


good.
7 7 7 7 7
C: III7 VI III7 VI III7 VI III7 VI III7 VI
less good.
bad.
very bad.
7 7 7 7 7
III7 VI III7 VI III7 VI III7 VI III7 VI

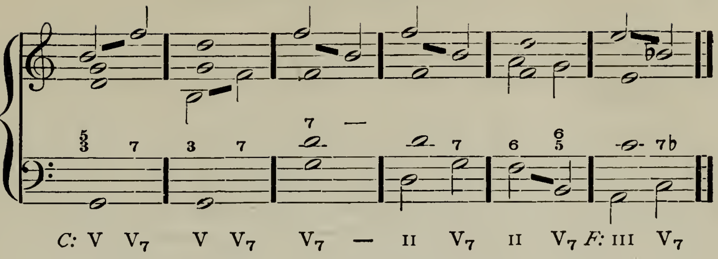
151.


rare.
bad.
tolerably good, but rare.
7 7 7 7 7
C: IV7 VII0 IV7 VII0 IV7 VII0 IV7 VII0 IV7 VII0

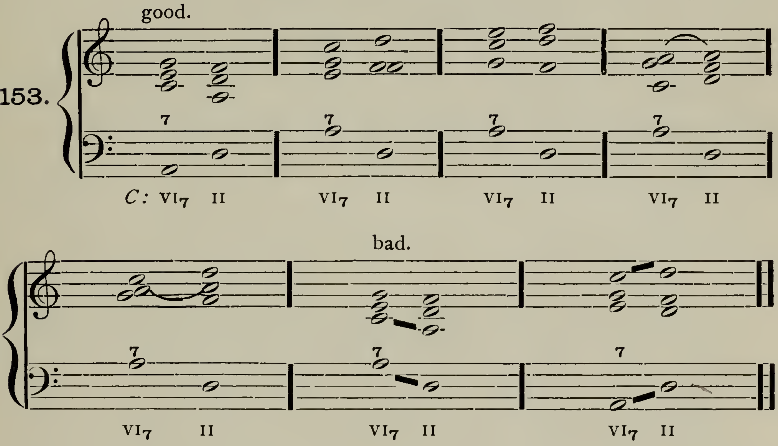
None of the resolutions in 151 are good, on account of the doubled leading-note in the triad.

A cadence-like resolution of this chord of the seventh on the fourth degree to the triad on the seventh degree occurs but seldom, and always has a rather unpleasant effect. Any such resolution necessitates a doubling of the leading-note in the triad on the fourth degree; moreover, the bass can be led only downward, because the skip upward from *F* to *B* embraces the interval of a so-called Tritone, i.e. an interval containing three *whole* tones. [The author terms the interval between the fourth and seventh degrees, in either direction, a tritone. *Tr.'s Note.*] Such a tritone *between two different chords* is to be avoided in *ascending progression*, when it forms an *augmented fourth;* because *all augmented intervals in upward progression* are inappropriate to the strict style of vocal composition, being hard to sing correctly, and not properly vocal. On the other hand, it is entirely correct *within one and the same chord in either direction;* it may likewise be employed without hesitation in *downward* progression, even when the chord changes, whether in the shape of an *augmented fourth* or *diminished fifth.* A few examples follow, in which its employment both within a chord, and between two different chords, is entirely allowable and correct.

152.

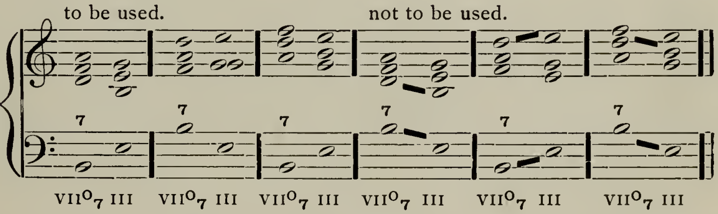


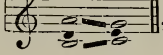
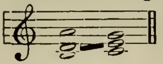
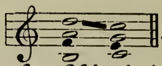
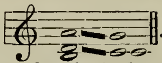
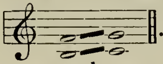
153.



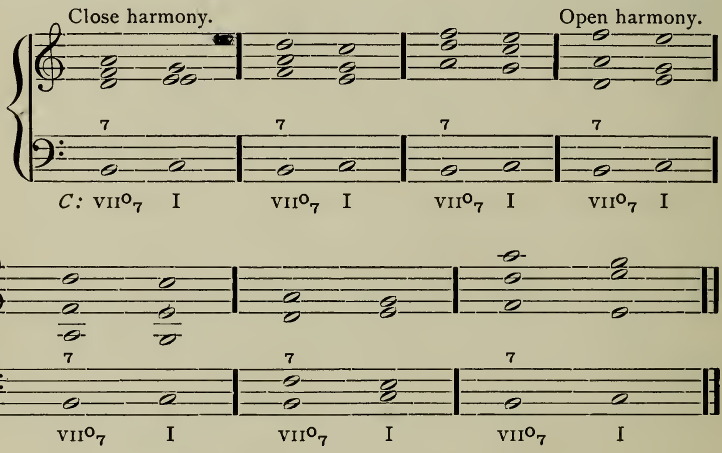
Below are cadence-like resolutions of the chord of the seventh on the 7th degree, which are seldom employed.

154.



Another and far more frequent resolution of this chord is that leading to the triad on the 1st degree. It is based on the natural tendency of the leading-note, the root of the chord of the seventh on the 7th degree, towards the octave of the tonic. This resolution, however, is dependent on various conditions. When the root ascends a semitone to the key-note of the scale, the seventh goes down a step, , in which case the third of the chord of the seventh can progress a step upwards to the third of the tonic triad, ; but the third can also be led down a step, in case the seventh is not a fifth above it, but a fourth below it . When the interval between third and seventh is that of a fifth, it is impossible to lead the third downwards, on account of the parallel fifths then arising . The fifth of the chord of the seventh must always be led down a step to the third of the tonic triad. It cannot progress upwards, because the interval of a diminished fifth subsisting between it and the root of the chord of the seventh forbids their progression to the perfect fifth of the tonic triad . (Compare §23). The resolutions of the chord of the seventh on the 7th degree to the tonic triad may therefore be exhibited as follows:

155.



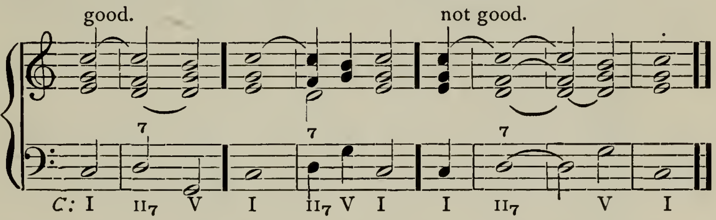
All these resolutions are good, and often occur in practice. As a general thing, however, the employment of the secondary chords of the seventh, more particularly in the cadence-like resolutions to *triads* shown above, is very much rarer than that of the dominant chord of the seventh. We shall meet most frequently with the secondary chords of the seventh on the 2nd and 7th degrees, — the latter chord with the resolution to the tonic triad. Still, in the exercises on these chords, we shall now and then introduce its cadence-like resolution to the triad on the 3rd degree.

§40. As most sevenths, especially the major ones, are sharply *dissonant intervals*, they require not only resolution, but *preparation.*

We say that a tone is *prepared*, when it is present in the same part of the preceding chord as a tone proper to that chord.

This *preparation* must be at least as long as the following dissonance. The preparing tone may, however, be longer than the dissonant tone which it prepares; it occurs very rarely that a dissonance is properly prepared by a tone of shorter duration than itself.

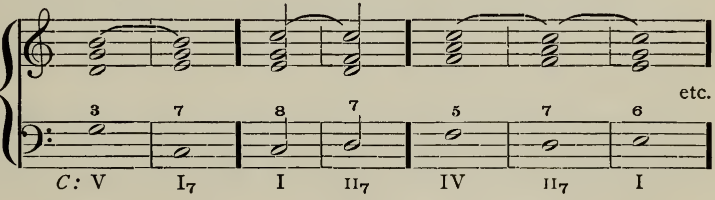
156.



For preparing a seventh, or any other dissonance, any interval of a triad or chord of the seventh will serve. The seventh can, therefore, although itself a dissonance, serve in its turn as a preparation for a new dissonance,* when it has itself been prepared.

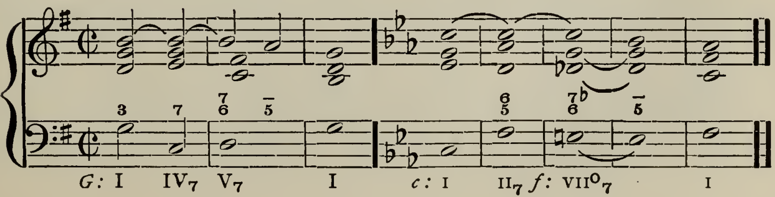
We connect the preparing note and the dissonance by a tie, as shown in the foregoing example. A preparing note can therefore always be tied to a note of equal value 𝅗𝅥𝅗𝅥; or to one of shorter duration than itself 𝅝𝅗𝅥, 𝅗𝅥♩; but with less propriety to one of longer duration ♩𝅗𝅥, ♩𝅝.

157.



---

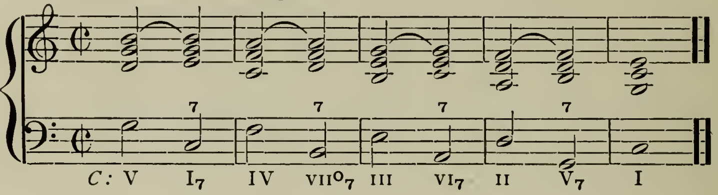
* For instance, either a major or minor seventh may be employed to prepare a suspension:



The preparation of a seventh, or of any other dissonance, may be effected on any beat; on a strong beat quite as well as on a weak one.

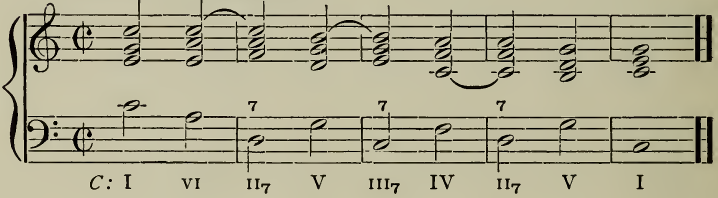
Preparation on a strong beat.

158.



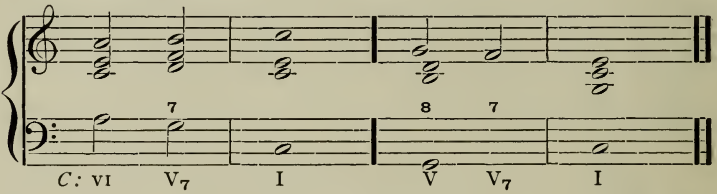
Preparation on a weak beat.

159.



The seventh of the dominant chord of the seventh may enter *by a step* without preparation.

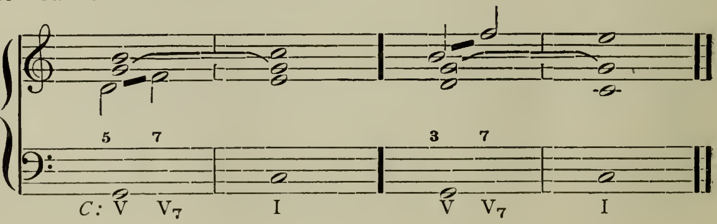
160.



It may enter similarly *by a skip:*

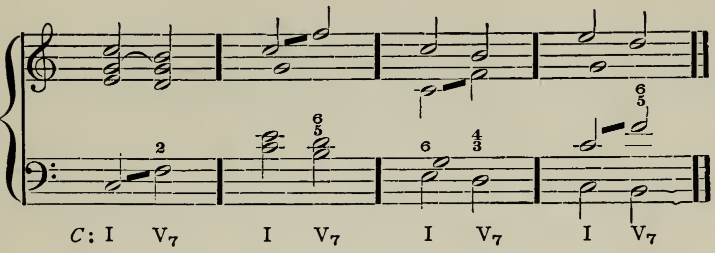
1. When the seventh is preceded by some other interval of the dominant triad, as the octave, so that the unprepared skipping seventh merely amplifies the triad, as it were, by making it a full chord of the seventh:

161.



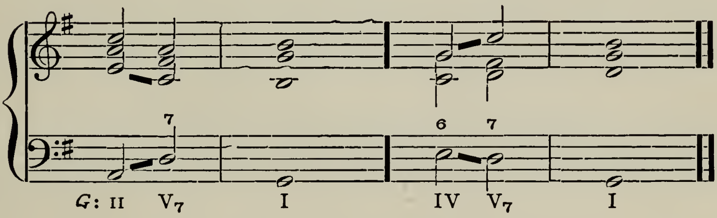
2. When the *root* of the *dominant chord of the seventh* is prepared by being present *in any other part:*

162.



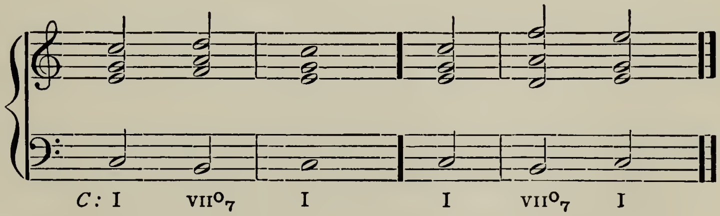
3. When progressing in *contrary motion* to the bass:

163.



The seventh of the chord of the seventh on the seventh degree requires *no* preparation, and *may enter freely.*

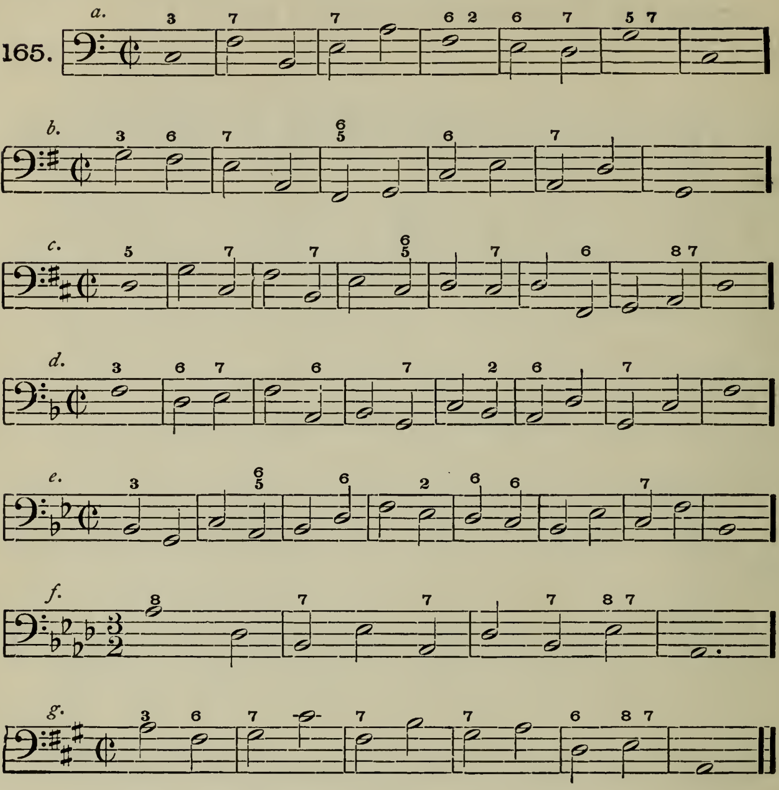
164.



The figuring of the secondary chords of the seventh with Roman numerals to which an Arabic figure 7 is added, may be learned from the foregoing exercises. (Also comp. App. I, p. 250).

Exercises.

165.

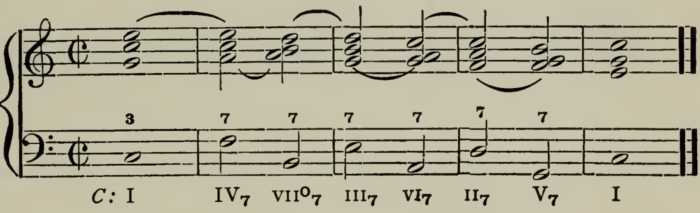


CHAPTER X.

Interconnection of the Chords of the Seventh in Major in their Fundamental Position; Inversions of these Chords, and their Interconnections.

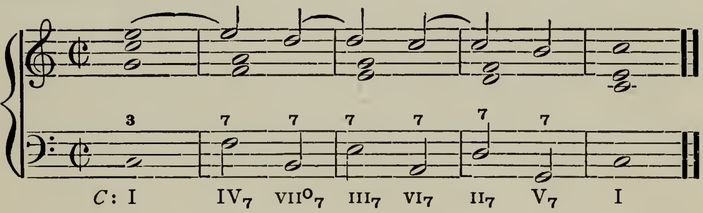
§41. We have already observed, that cadence-like resolutions of the secondary chords of the seventh to triads seldom occur. Such progressions are often somewhat stiff. The effect is much smoother when several successive chords of the seventh are written in cadence-like progression, i. e. when each chord of the seventh resolves to another chord of the seventh on the degree a fourth above it or a fifth below it. Where the resolution of the first chord of the seventh to the second is effected according to the familiar rule, that the seventh is to be led downwards, we simply have to let the third of the first chord lie, this giving us the preparation of the seventh in the second chord. When several chords of the seventh follow each other in such cadence-like progression, a sequence of chords of the seventh arises, in which the fifth of every other chord will be dropped.

166 *a.*



or, with the same chords,

166 *b.*

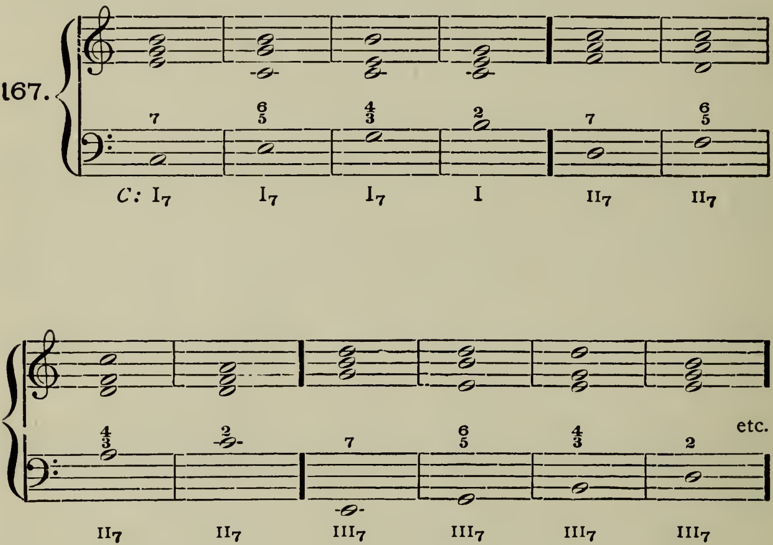


In Ex. 166 *a* the first chord of the seventh in each measure appears complete with its fifth, while in the second chord the fifth is dropped; the leading of the parts at 166 *b* gives the same series of chords, but here the first chord of the seventh in each measure is incomplete (without a fifth), while the second chord is complete. In either case the third of one chord of the seventh was always the preparing tone for the seventh of the next chord, the third of this latter then preparing the seventh of the next chord, etc.

The cadence-like progressions of these chords, whether with triads or chords of the seventh, become far more diversified by the employment of the *inversions* of the secondary chords of the seventh.

Like the dominant chord of the seventh, each of these chords may be written in three inversions: As a chord of the fifth and sixth, of the third and fourth, or chord of the second. These inversions are formed in the same way as those of the dominant chord of the seventh, the bass taking, in the chord of the fifth and sixth, the third of the fundamental chord; in the chord of the third and fourth, its fifth; and in the chord of the second, its seventh.

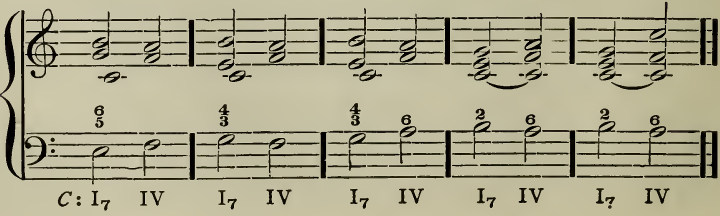
167.



The cadence-like resolutions of these inversions, whether effected to the triad or to the chord of the seventh either a fourth higher or a fifth lower, will in every case yield either chord named complete with all its intervals.

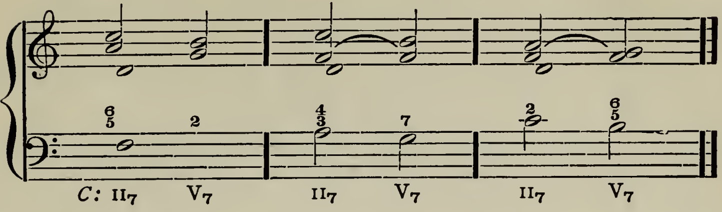
Cadence-like resolutions of the inversions to the triad.

168.



Cadence-like resolutions of the inversions to the chord of the seventh.

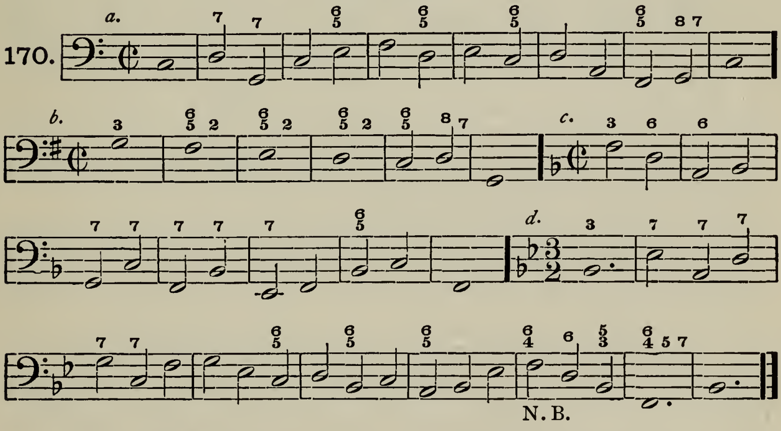
169.



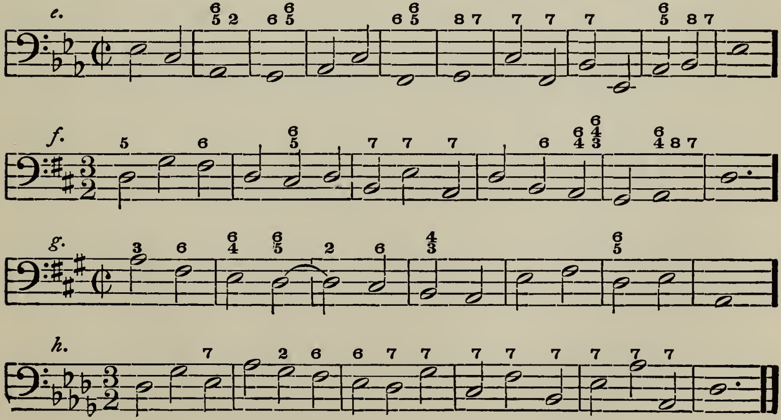
(For the following Exercises comp. App. I, p. 251, and App. II, p. 276.)

Exercises.

170.



N. B. The three highest parts may be held to the descending bass of this measure.

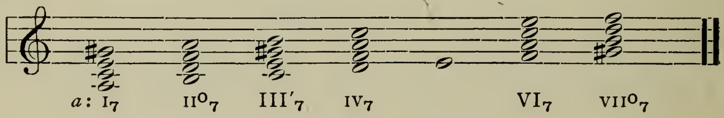


CHAPTER XI.

The Secondary Chords of the Seventh in Minor, and Their Inversions.

§42. The most important and most frequently employed secondary chords of the seventh in minor are those on the 2nd and 7th degrees. Chords of the seventh can, to be sure, be erected on the other degrees of the scale, but they can seldom be used in cadence-like resolutions. On examining the following group of secondary chords of the seventh in minor

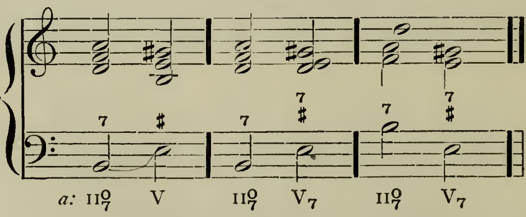
171.



we find three *new* forms of these chords, namely, a *minor* triad with *major* seventh on the 1st degree, an *augmented* triad with *major* seventh on the 3rd degree, and a *diminished* triad with *diminished* seventh on the 7th degree.

The chord on the 1st degree is not adapted for resolution according to the rules we have hitherto learned; its seventh *g*♯, the leading-note of the scale, cannot be led downward by the step of an augmented second.

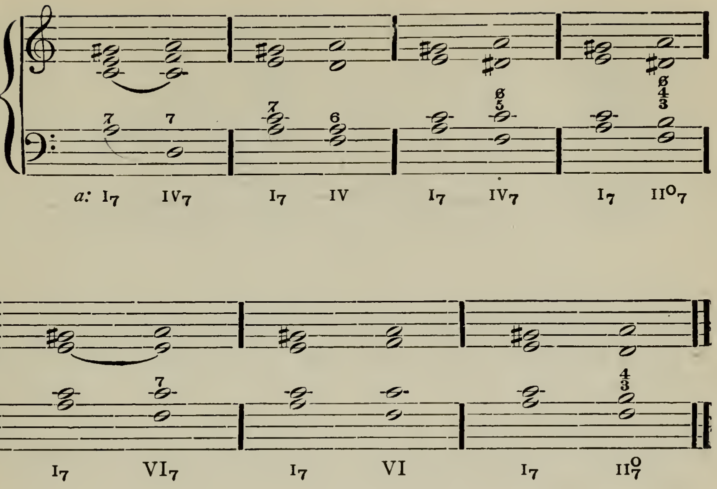
For this reason we shall omit this chord in our present exercises.* The chord of the seventh on the 2nd degree takes a cadence-like resolution to the dominant triad or, with the third held, to the dominant chord of the seventh. In these resolutions the fifth of the chord of the seventh on the 2nd degree must always be led downwards, and the upward step of an augmented second avoided: e.g.



---

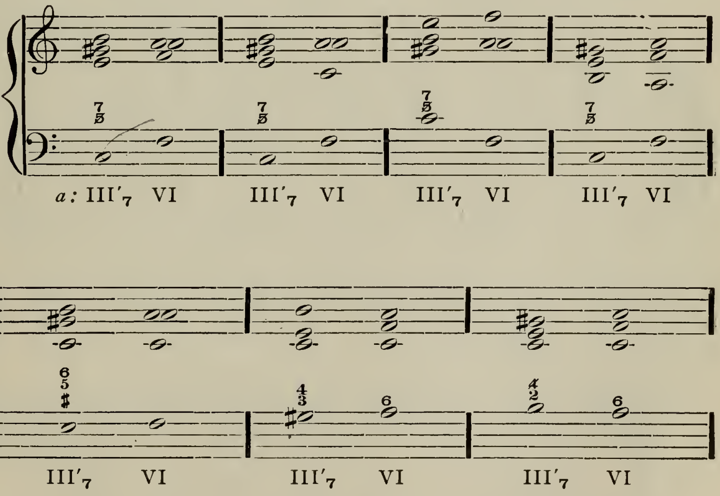
*We shall return to the secondary chord of the seventh on the 1st degree in minor when treating of the free resolutions of the chords of the seventh. For it admits of a cadence-like progression, although not with a descending seventh, to the triad on the 4th degree both in its fundamental position and as a chord of the sixth, as well as of various other non-cadenced progressions; in modulatory resolutions its seventh may also be led down to *G* or *F*♯ (compare Chapter XIII, §46, Ex. 199 and 200.)

172.



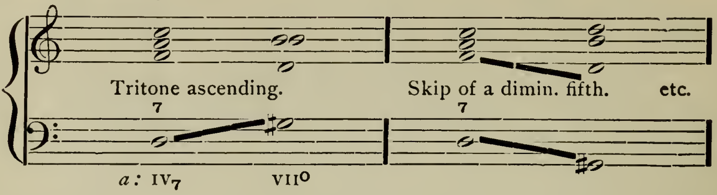
The chord of the seventh on the 3rd degree is also little used. It must be resolved to the triad on the 6th degree in such a manner that its fifth *g*♯ (the leading-note) always progresses upward.

173.


a: III′7 VI III′7 VI III′7 VI III′7 VI
III′7 VI III′7 VI III′7 VI

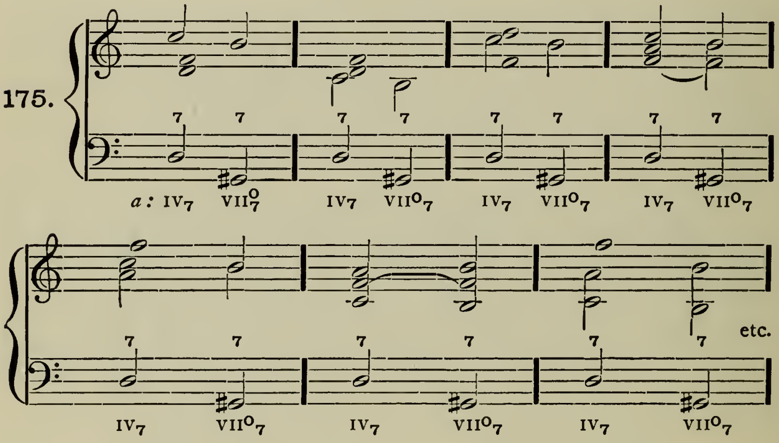
A cadence-like connection of the chord of the seventh on the 4th degree with the diminished triad on the 7th degree is impracticable on account of the constrained and incorrect leading of the parts necessitated thereby.

174.



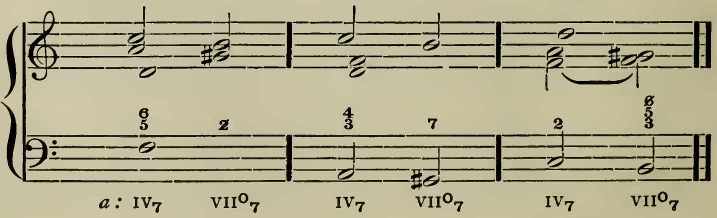
On the other hand, a cadence-like resolution of this chord of the seventh to that on the 7th degree may be effected by leading the bass down by a skip of a diminished fifth. An upward skip in the bass of an augmented *fourth* would give us a tritone in upward progression (comp. §39), and must consequently be avoided. The progressions between these two chords are easiest, when the fifth of the chord of the seventh on the 4th degree is omitted.

175.


7 7 7 7 7 7 7 7
a: IV₇ VII°₇ IV₇ VII°₇ IV₇ VII°₇ IV₇ VII°₇
7 7 7 7 7 7
IV₇ VII°₇ IV₇ VII°₇ IV₇ VII°₇
etc.

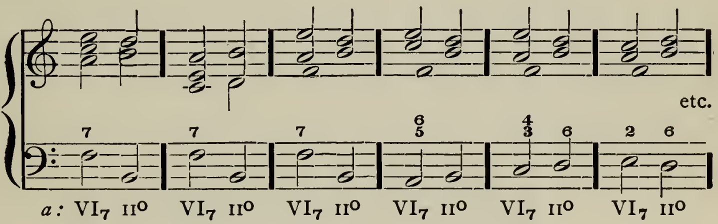
Carefully avoid doubling the leading-note in the chord of the seventh on the 7th degree. — The inversions of both chords are also adapted for interconnection.

176.



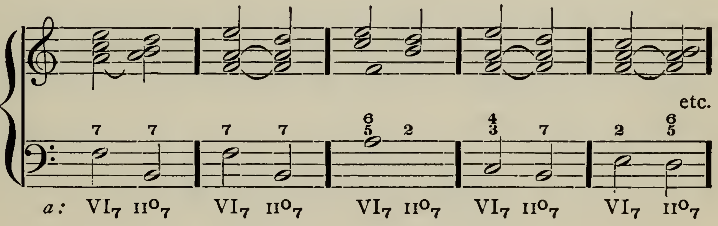
A cadence-like progression between the chord of the seventh on the 6th degree and the triad on the 2nd degree is possible, but of rare occurrence; the bass (in order to avoid the tritone) can only skip down by a diminished fifth. Nevertheless, the progression is more easily effected in minor than that of the same chords in major (4th and 7th degrees). For in minor the root of the diminished triad on the 2nd degree is not the leading-note of the scale, and therefore can be doubled (comp. §39, Ex. 151.)

177.


etc.
7 7 7 6 5 4 3 6 2 6
a: VI_7 II^o VI_7 II^o VI_7 II^o VI_7 II^o VI_7 II^o VI_7 II^o

We more frequently meet with progressions between the chord of the seventh on the 6th degree and that on the 2nd. They are effected in minor, both in the fundamental position and in the inversions, precisely the same as with the similar chords on the 4th and 7th degrees in major.

178.

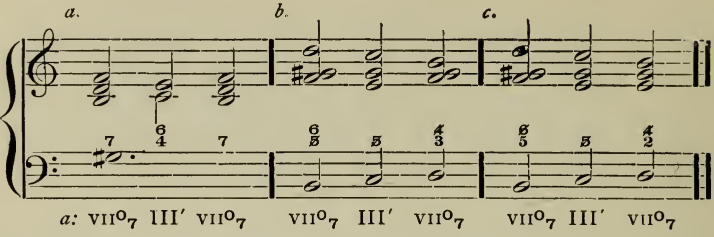

etc.
7 7 7 7 6 5 2 4 3 7 2 6 5
a: VI_7 II^o_7 VI_7 II^o_7 VI_7 II^o_7 VI_7 II^o_7 VI_7 II^o_7

§43. The most frequently employed and most important of the secondary chords of the seventh in minor is that on the 7th degree, called

The Diminished Chord of the Seventh.

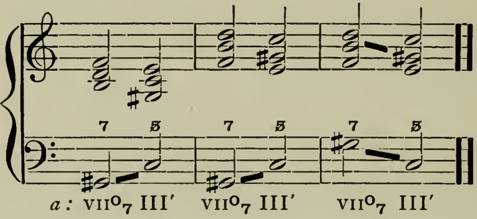
because it has, in addition to a diminished triad, a diminished seventh (reckoning from the root). It can in no case progress in cadence-like resolution to the triad or chord of the seventh on the 3rd degree. Progressions like the following

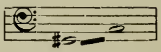
179.

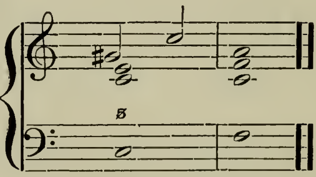


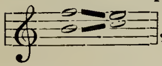
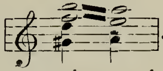
can never be regarded as resolutions of the chord of the seventh on the 7th degree to the augmented triad on the 3rd degree.* A resolution to this triad in its fundamental position is impracticable, on account of the bad leading of the parts invariably resulting.

180.



The *ascending* skip of a diminished fourth  is to be prohibited, as an unvocal interval, as strictly as the *ascending* tritone and the step of an augmented second; whereas in descending, the skip of a diminished fourth is *always allowable and of good effect*. Even within the same chord it can hardly be sung in ascending progression.

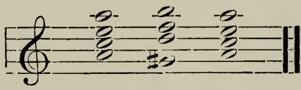


The natural resolution of the chord of the seventh on the 7th degree in minor *can lead only to the triad on the 1st degree*, exactly as in major. (Comp. Ex. 155, §39). Its resolution is effected precisely as in Ex. 155. Its root (the leading tone of the scale) progresses upwards by a semitone, its seventh downwards, its third ascends a step when it forms a diminished fifth with the seventh , but can also be led *downwards* when it forms an augmented fourth with the seventh . The fifth of the diminished chord of the seventh must always be led downwards (for reasons, comp. §39 and §23). The resolution of the chord of the seventh on the 7th degree in minor is never in cadence-form. (Comp. Ex. 179, and 180, 181 and 182). The diminished seventh of the chord of the seventh on the 7th degree in minor requires no preparation; the chord can always enter freely.

---

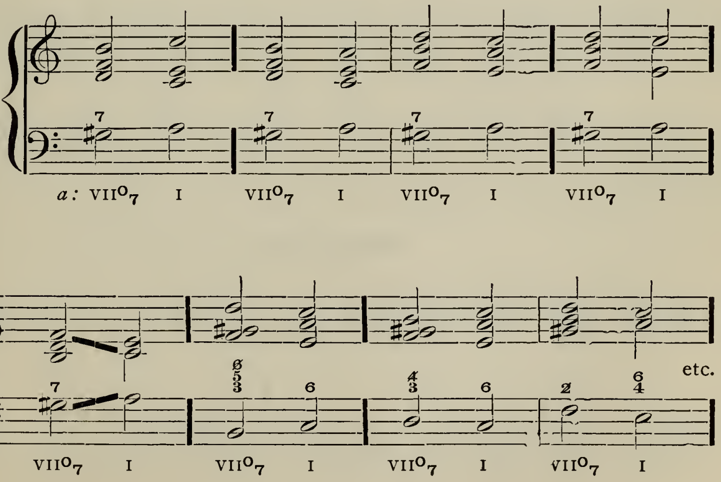
*Further on we shall meet with these progressions under the name of accidental chord-formations (passing chords).

181.



We hardly need remark, that a resolution of the diminished chord of the seventh to the *chord of the seventh* on the 1st degree is impossible in minor, although the resolution to the *triad* on the 1st degree is so natural. A few progressions of the diminished chord of the seventh to the triad on the 1st degree now follow.

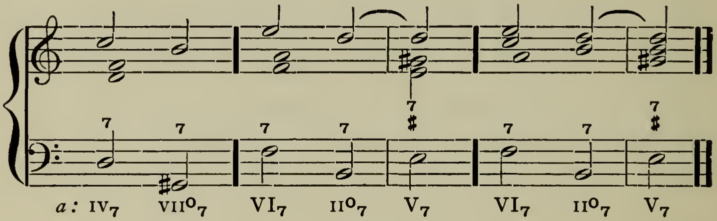
182.



The seventh of the chord of the seventh on the 2nd degree in minor may also enter without preparation, because it is combined with a diminished triad.

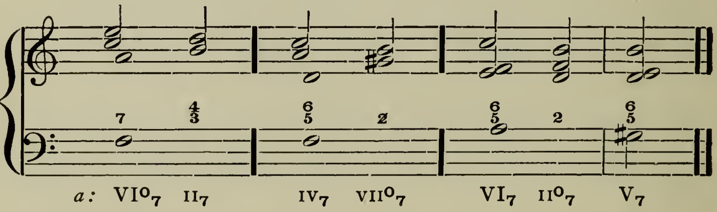
When two or three chords of the seventh occur in succession, in minor, and in the *fundamental position*, the fifth of every other chord must be dropped.

183.



When a chord of the seventh in the fundamental position is followed by the inversion of another, or two or more inversions occur in succession, the complete chords can always be given.

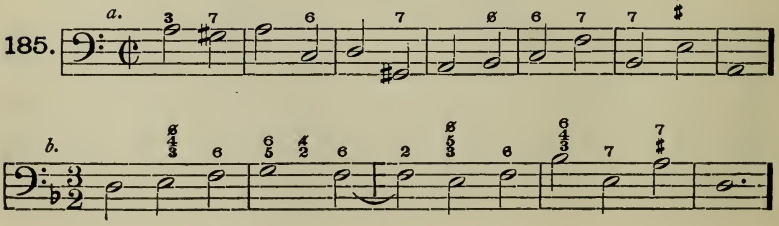
184.



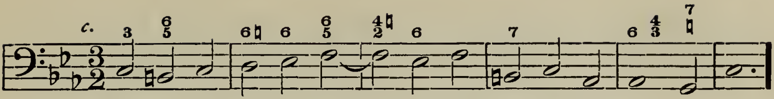
(For the following Exercises com. App. I, p. 252, and App. II, p. 276.)

Exercises.

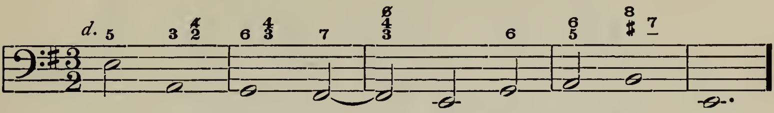
185.



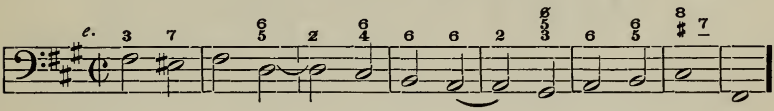
c.



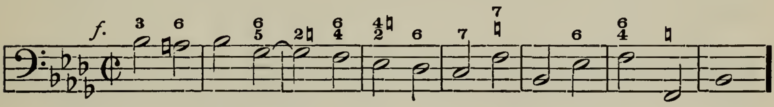
d.



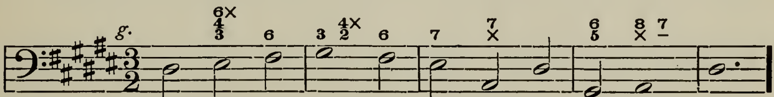
e.



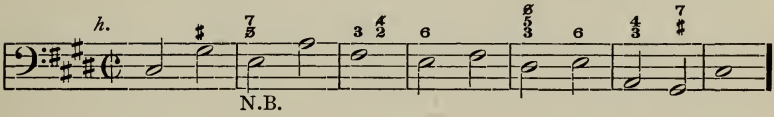
f.



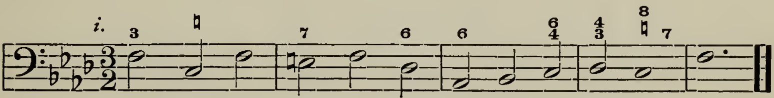
g.



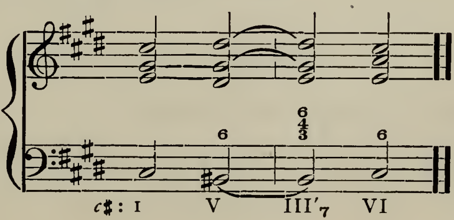
h.



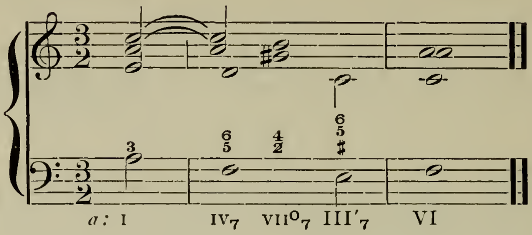
i.



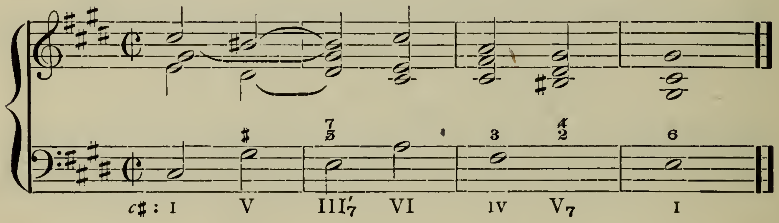
In the exercise before the last we have, at N. B., the chord of the seventh on the 3rd degree with a cadence-like resolution to the triad on the 6th degree. The inversions of this chord of the seventh prove to be of little use, and least of all with a cadence-like resolution. Progressions like the following



are constrained and unnatural. The first inversion of this chord is, however, more manageable, as the following example shows.



The opening measures of Ex. 184 (*h*) may be worked out as follows:



CHAPTER XII.

Non-Cadenced Progressions between the Chords of the Seventh and Chords On other Degrees.

§44. In all the preceding exercises and examples we have always resolved the chords of the seventh, as fundamentals or inversions, to chords situated a fourth above or a fifth below them. To this progression, the most natural one in principle, we now add freer and non-cadenced resolutions. Such progressions are called

Deceptive Cadences,

and can assume the most various forms:

1. By combining chords of the seventh with chords *belonging to the same key*, but on different degrees from those which form the cadence-like progressions;

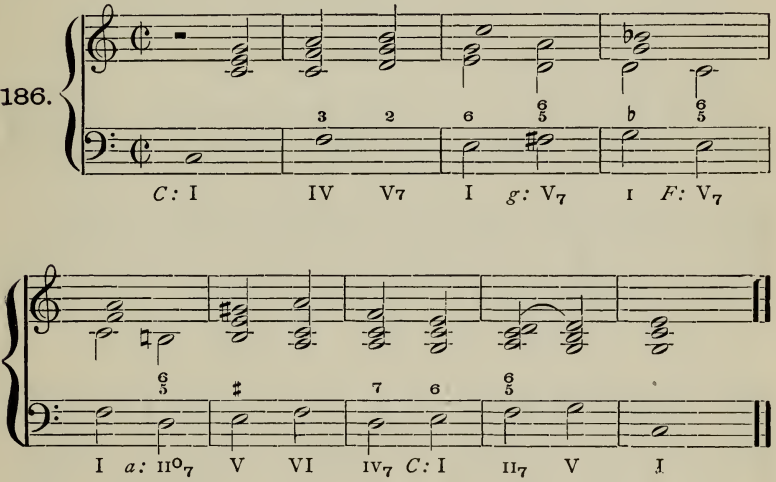
2. By connecting chords of the seventh in one key with chords *belonging to other keys*, and on *different* degrees.

In the latter case we obtain a

Modulation.

A modulation is brought about by introducing into a piece a chord *foreign* to the key till then predominant, i. e. a chord belonging to another key.

186.



Thus Ex. 186 passes into *g*-minor in the third measure, *F*-major in the fourth, and *a*-minor in the fifth, not returning to *C*-major till the seventh measure. Modulating and non-modulating deceptive cadences may be formed in three ways:

a. With the *regular* downward progression of the seventh;

b. With the seventh *held* (or enharmonically changed for the augmented sixth*).

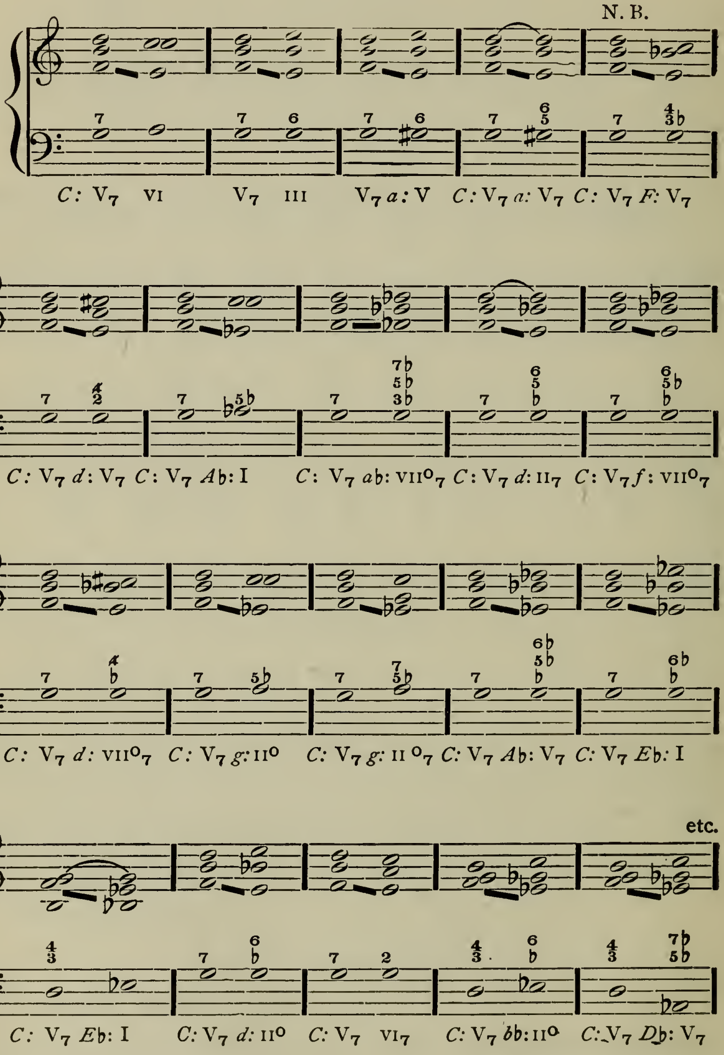
c. With the seventh ascending *by a step*.

We commence our examination of the deceptive cadences with the dominant chord of the seventh, showing the pupil some progressions of this chord to triads and chords of the seventh on other degrees and in other keys; at first with the *regular downward leading of the seventh.* (Comp. App. II, p. 277).

---

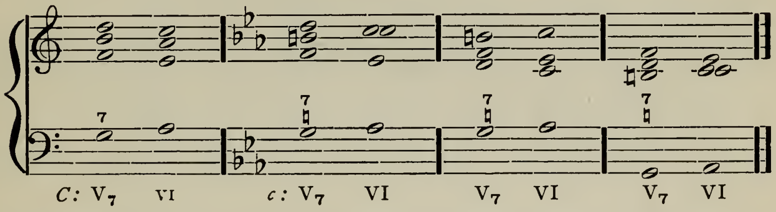
*This change of the seventh for the augmented sixth is in itself, in point of fact, an upward progression of the seventh, because the minor seventh forms a narrower interval with the root than does the augmented sixth.

187.


N. B.
C: V7 VI V7 III V7 a: V C: V7 a: V7 C: V7 F: V7
C: V7 d: V7 C: V7 A♭: I C: V7 a♭: VII°7 C: V7 d: II7 C: V7 f: VII°7
C: V7 d: VII°7 C: V7 g: II° C: V7 g: II °7 C: V7 A♭: V7 C: V7 E♭: I
etc.
C: V7 E♭: I C: V7 d: II° C: V7 VI7 C: V7 b♭: II° C: V7 D♭: V7

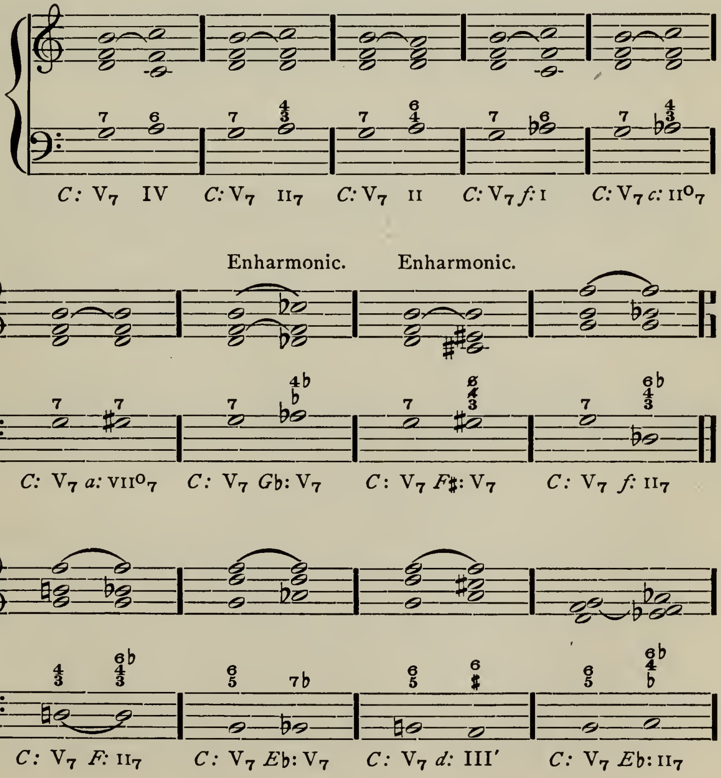
The connection of the dominant chords of *C*-major and *F*-major in the fifth measure, marked N. B., is a cadenced modulation.

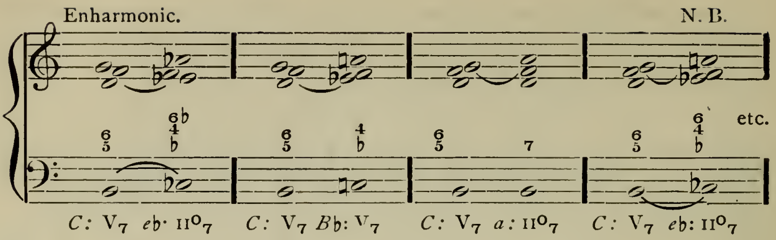
We add the following rule: In four-part writing, when the dominant chord of the seventh in its fundamental position is followed by the triad on the 6th degree, the former must be written complete, with all its intervals; and, in minor, the third of the triad on the 6th degree must be doubled; e. g.



Below are given some non-cadenced progressions between the dominant chord of the seventh and chords on other degrees and in other keys, with the seventh *held.*

188.

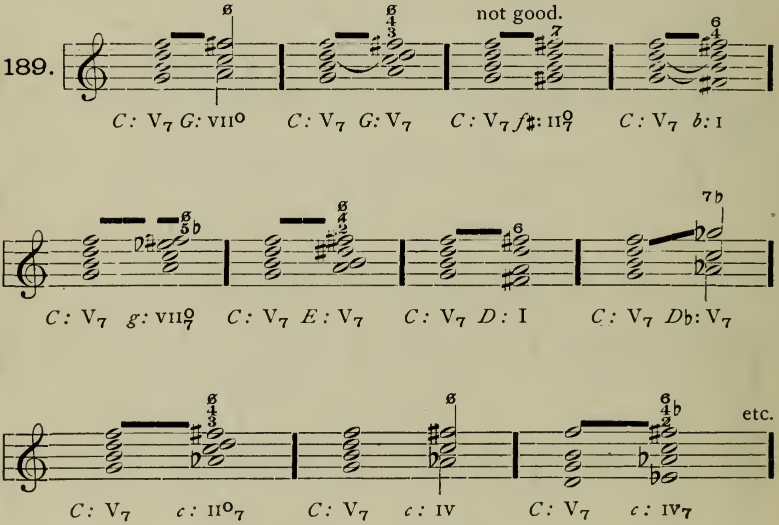




The last chord, marked N. B., is a new chord for the pupil; it will be treated among the altered chords as the augmented chord of the third and fourth.

Progressions between the dominant chord of the seventh and chords on other degrees and in other keys, in which the seventh ascends:

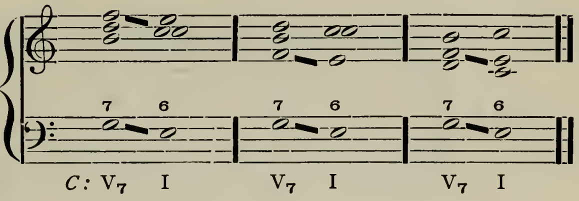
189.



The chords to which the dominant chord of the seventh progresses in the last two measures, will also be treated of in the chapter on "The altered chords."

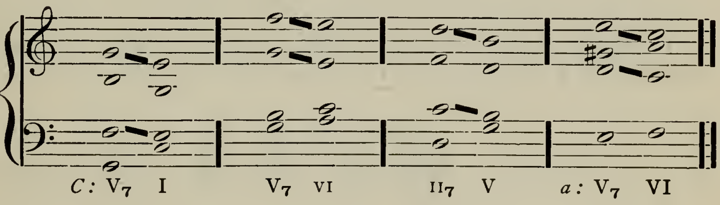
§45. The seventh must be led *upwards*, except in the rarest cases, when, upon the resolution of the chord of the seventh, another interval of that chord takes, in descending progression, the tone to which the seventh properly and naturally resolves. This case may occur even in the usual cadence-like resolution of the chord of the seventh on the fifth degree to the tonic triad. Progressions like the following

190.



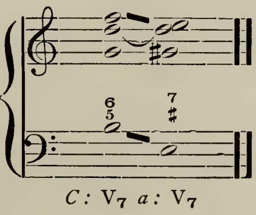
are strictly prohibited under all circumstances; because the covered octaves then formed must be considered quite as incorrect in the strict style as open octaves, although the higher part progresses only a semitone. This rule holds good for all parts; consequently, the progressions at 190, and those following at 191, should always be avoided as bad and incorrect, whether they appear as cadence-like or other resolutions of any chord of the seventh*.

191.



* As one of the few and very rare exceptions to this rule we append the following progression:

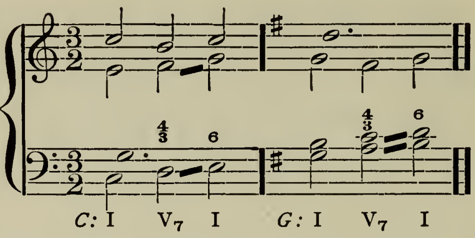
192.



Here the bass *B* progresses, not to the third, but to the root *E* of the second chord; the covered octaves are likewise softened by the contrary motion of the tenor and the holding of the alto.

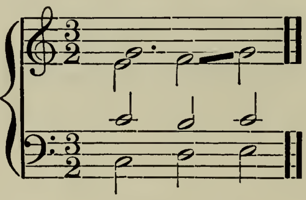
When an interval of the chord of the seventh takes, in *ascending* progression, the tone to which the seventh properly resolves, an upward progression of the seventh is also desirable in many cases ; e.g.

193 a.

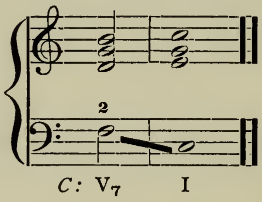


But Ex. 193 *b* cannot be approved of, because the seventh and root of the chord of the seventh lie too close together.

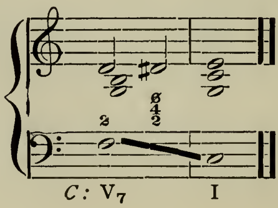
193 b.



We must mention, finally, that the dominant seventh may also be led down by a skip, e. g. in the cadence-like resolution V – I.

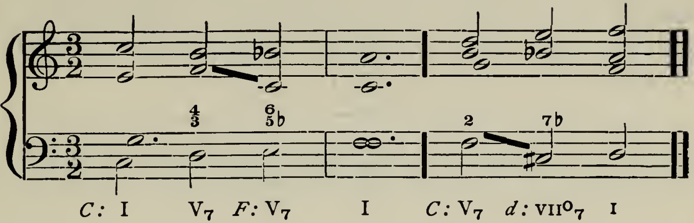


This resolution has a better effect when the fifth of the chord of the seventh is chromatically raised. (Compare §49.)



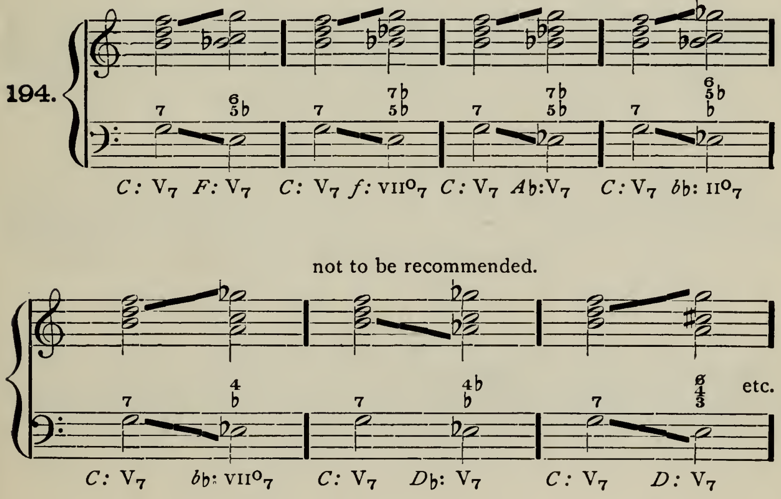
The same can also occur in modulatory phrases; e. g.

193 c.



To illustrate the rule given at the beginning of §45, we add a few non-cadenced progressions of the dominant chord of the seventh to chords in other keys and on other degrees.

194.

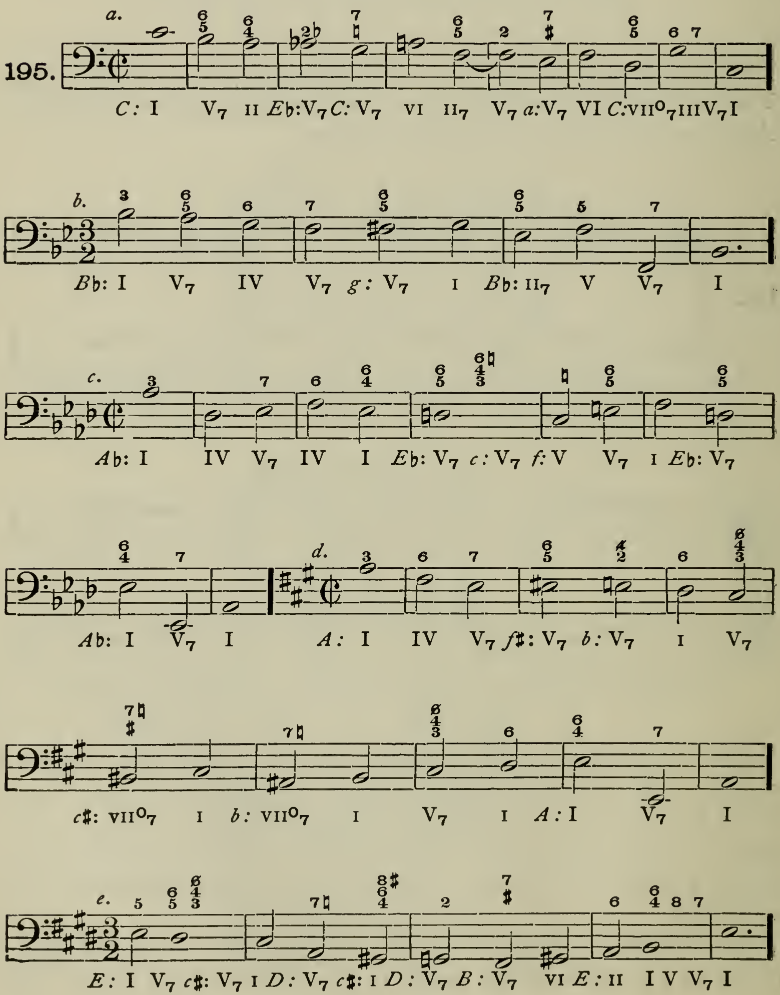

7
6
5♭
7
7♭
5♭
7
7♭
5♭
7
6
5♭
♭
C: V₇ F: V₇ C: V₇ f: vii°₇ C: V₇ A♭: V₇ C: V₇ b♭: ii°₇
not to be recommended.
7
4
♭
7
4♭
♭
7
6
4
3
etc.
C: V₇ b♭: vii°₇ C: V₇ D♭: V₇ C: V₇ D: V₇

The progressions of the dominant chord of the seventh to other chords, as given in §§44 and 45, will give the pupil new ideas about chord-progressions at which we have merely hinted. And in the same way that new creations have been and will be continually supplied by gifted artists, the supply of new chord progressions will never fail.

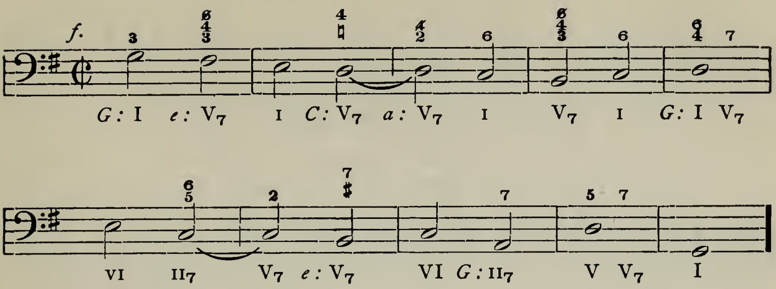
In the following exercises we shall by no means exhaust the progressions of the dominant chord of the seventh explained in the above. A change of key within an exercise will be marked, for the present, by large Roman numerals for major and small ones for minor. In all later exercises, however, the pupil himself should note the progress of the modulation in this manner beneath the bass. (Compare also App. I, p. 254).

Exercises.

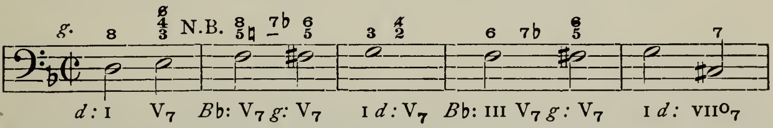
195.


a.
C: I V7 II E♭:V7 C: V7 VI II7 V7 a:V7 VI C:VII°7 III V7 I
b.
B♭: I V7 IV V7 g: V7 I B♭: II7 V V7 I
c.
A♭: I IV V7 IV I E♭: V7 c: V7 f: V V7 I E♭: V7
A♭: I V7 I
d.
A: I IV V7 f♯: V7 b: V7 I V7
c♯: VII°7 I b: VII°7 I V7 I A: I V7 I
e.
E: I V7 c♯: V7 I D: V7 c♯: I D: V7 B: V7 VI E: II I V V7 I

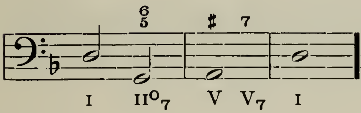
f.


G: I e: V7 I C: V7 a: V7 I V7 I G: I V7
VI II7 V7 e: V7 VI G: II7 V V7 I

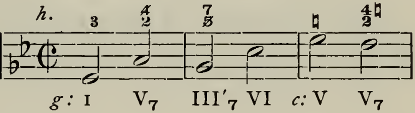
g.

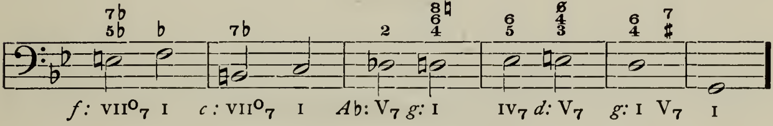


At N. B. the leading-tone *c*♯ must be led *downward* to *c*♮.

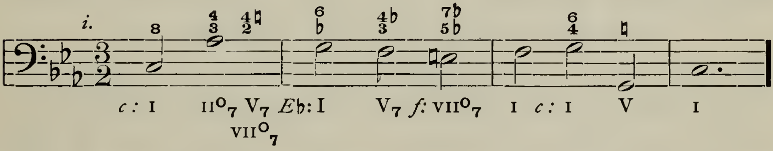


h.

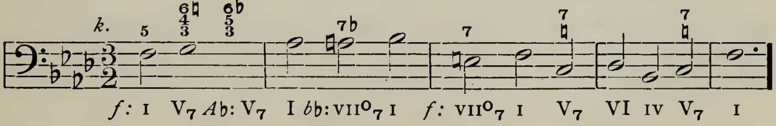




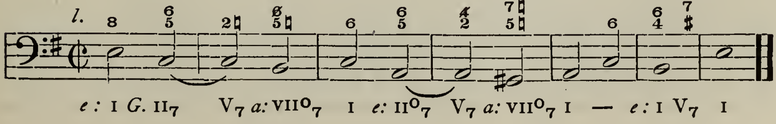
i.

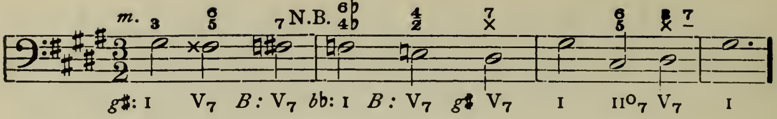


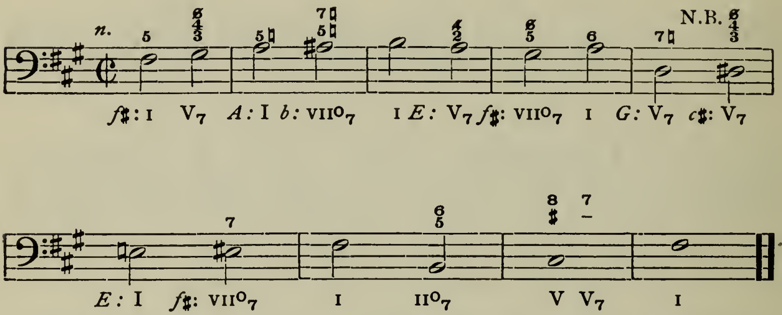
k.



l.






n.
N.B.
f♯: I V7 A: I b: VII°7 I E: V7 f♯: VII°7 I G: V7 c♯: V7
E: I f♯: VII°7 I II°7 V V7 I

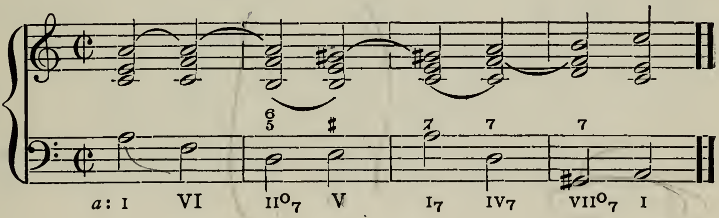
At N. B., in Exercises *m* and *n*, the tones *c*♯ – *d*♭, and *c* – *b*♯, are enharmonically changed.

CHAPTER XIII.

Progressions Between the Secondary Chords of the Seventh and Chords on Other Degrees and in Other Keys.

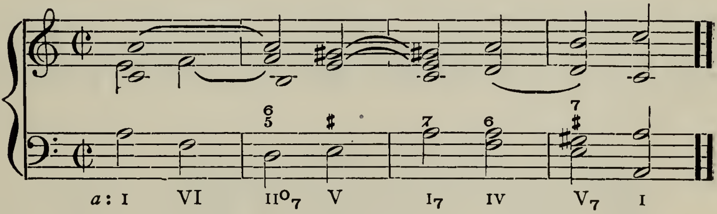
§46. The secondary chords of the seventh also admit of very various non-cadenced progressions; some of them, which we can employ but little or not at all in cadence-like progressions, prove to be adapted for other progressions. This we shall illustrate, to begin with, in the chord of the seventh on the 1st degree in minor, which occurs most seldom and is most difficult to manage. Its seventh, being the leading-note of the key, can not be led downwards for the special reason, that the step of an augmented second which it would have to take is forbidden as unmelodic in descending progression; it might be held or, in case of a *modulatory* resolution, be led downward to *G* or *F*♯. But the *natural* progression of this seventh is always upward; in this case, too, it is possible to effect a cadence-like resolution of the chord of the seventh on the 1st degree in minor to the *chord of the seventh* on the 4th degree in its *fundamental* position, or to the *chord of the sixth* derived from the *triad* on the 4th degree; in which case we assume, as a matter of course, that the chord of the seventh on the 1st degree is *carefully prepared*, and that the chord of the seventh on the 4th degree is properly resolved, as in the following examples; in which the bass was obliged to progress to the lower *G*♯ on account of the cadence-like resolution of the chord of the seventh on the 4th degree to that on the 7th degree;

196.



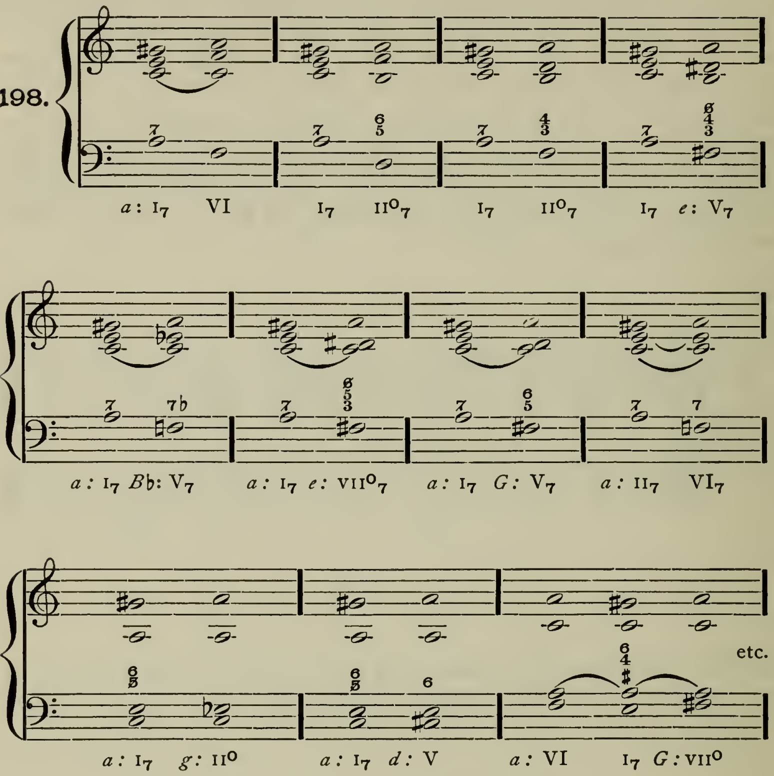
or with the resolution of the chord of the seventh on the 1st degree to the chord of the sixth derived from the *triad* on the 4th degree.

197.



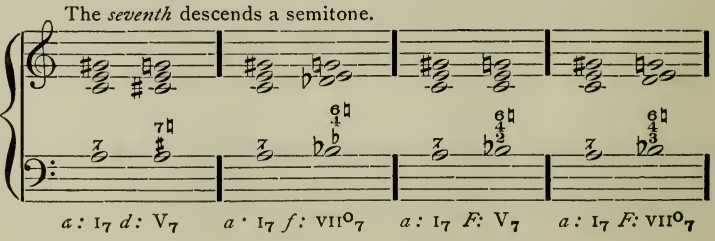
Besides these cadence-like resolutions of the chord of the seventh on the 1st degree in minor, we give below a few other progressions which appear less constrained than the cadence-like ones. It is always assumed, of course, that the above-mentioned chord will be carefully prepared in all cases.

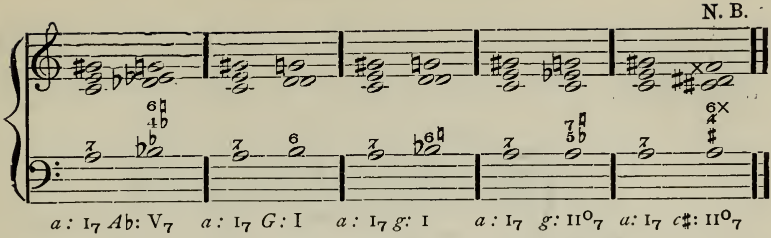
198.


a: I7 VI I7 II°7 I7 II°7 I7 e: V7
a: I7 B♭: V7 a: I7 e: VII°7 a: I7 G: V7 a: II7 VI7
a: I7 g: II° a: I7 d: V a: VI I7 G: VII°
etc.

In modulatory progressions, however, we are also in a position to lead the seventh of the above chord downward by a step. (See Note, §42, Ch. XI).

199.

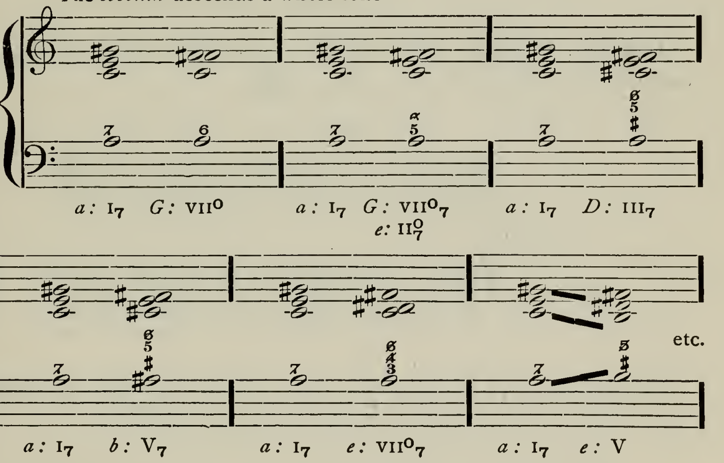

The *seventh* descends a semitone.



Further on we become acquainted with the chord marked N. B. under the name of the augmented chord of the third, fourth, and sixth.

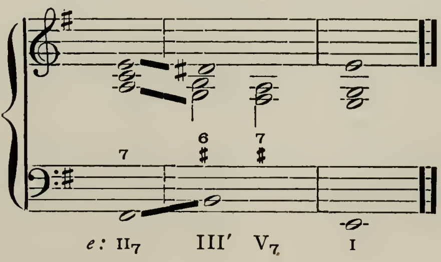
The *seventh* descends a whole tone.

200.



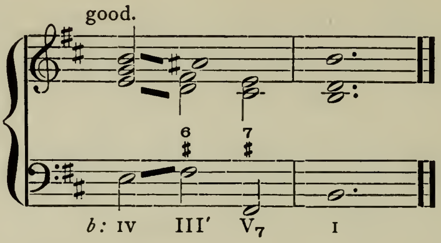
The parallel motion between soprano and tenor is covered and counter-balanced by the contrary leading of the bass; still, we do not wish to recommend such progressions to the pupil, although in this case the downward progression from an augmented fifth to a perfect one is permissible by way of exception. It is a different matter when the perfect fifth is followed by the augmented fifth below:

201.



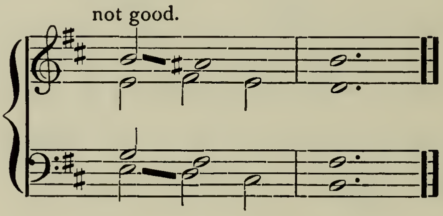
such progressions have been written by the best masters in the strict style, and are always allowable when the bass progresses in contrary motion.

202.



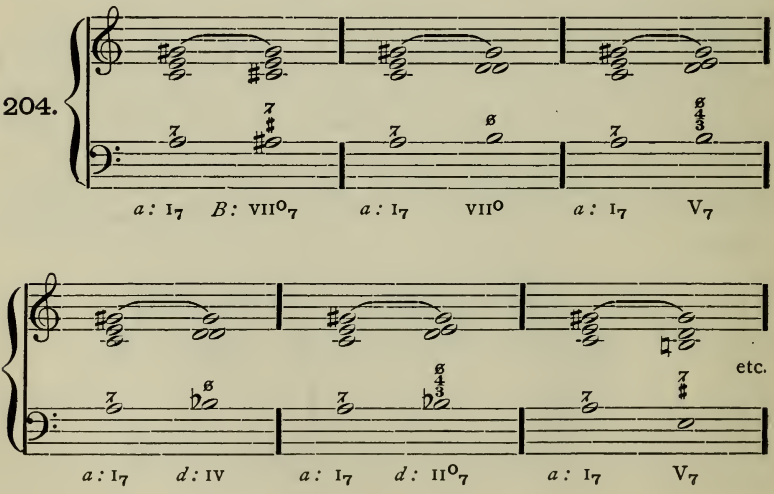
But such a progression of fifths is not to be recommended in the outer parts. (Comp. App. II, p. 277.)

203.



Progressions of the chord of the seventh on the 1st degree in minor can also be effected when the seventh is held.

204.



§47. Should many of these progressions sound harsh and strange, it must not be forgotten that they are given here out of all connection with any preceding or following chords. They can all be used; their effect in each individual case will depend on how the *first* chord is prepared and how the *second* progresses.

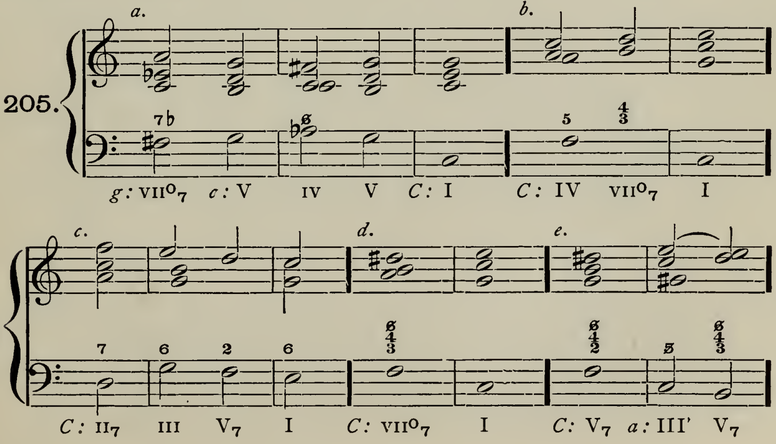
After these practical illustrations of the manifold progressions which may be effected with the secondary chord of the seventh on the 1st degree in minor, the least used and hardest to manage of all chords of its class, we shall close this chapter with a few remarks.

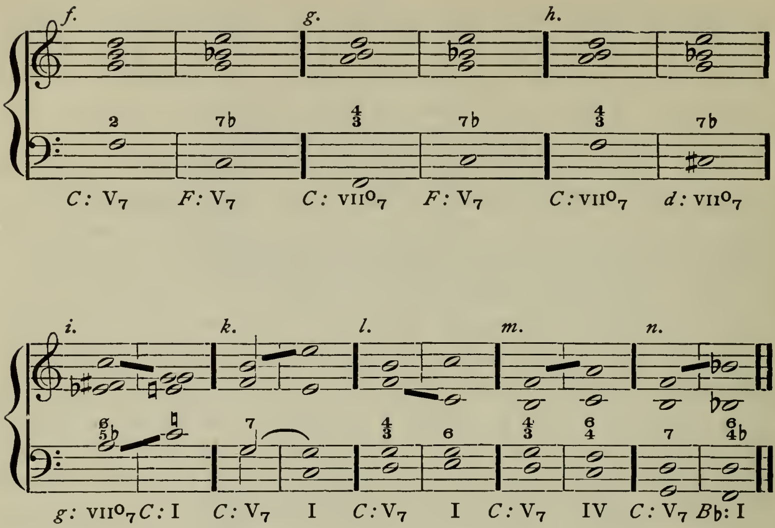
Every secondary chord of the seventh may be employed either with the regular downward resolution of the seventh, or with the seventh held or led upwards in resolutions of a free or cadence-like character (deceptive cadences).

It would far exceed the limits of this book to introduce a table of all possible resolutions of all the secondary chords of the seventh. In the following exercises the pupil will meet with a number of deceptive cadences. He may also try by himself to form resolutions of the remaining secondary chords of the seventh, after the pattern of those shown for the dominant chord of the seventh and for that on the 1st degree in minor. To assist his judgment in regard to the correctness and usefulness of such progressions, a few suggestions follow:

In general, any progression may be sanctioned in which one or two tones common to the two chords are held in the same part or parts. But even without this natural bridge of a sustained tone, the progression may be good when the several parts are led in true vocal style from the tones of the first chord to those of the second.

205.

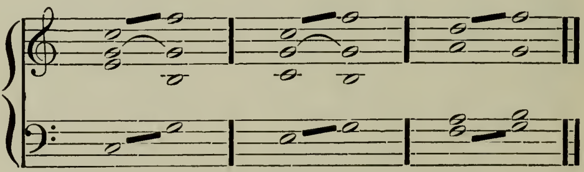




From Examples 205*d*, *e*, *f*, *g*, *h*, *i*, *k*, *l*, *m*, and *n* the pupil will perceive, that even the free progression of separate intervals in chords of the seventh may be sanctioned.

It must be borne in mind, that the entrance of the *root* and *seventh* of a chord of the seventh in *parallel motion* almost always has a bad effect, and should therefore be carefully avoided. The next three examples show a bad leading of the parts.

206.

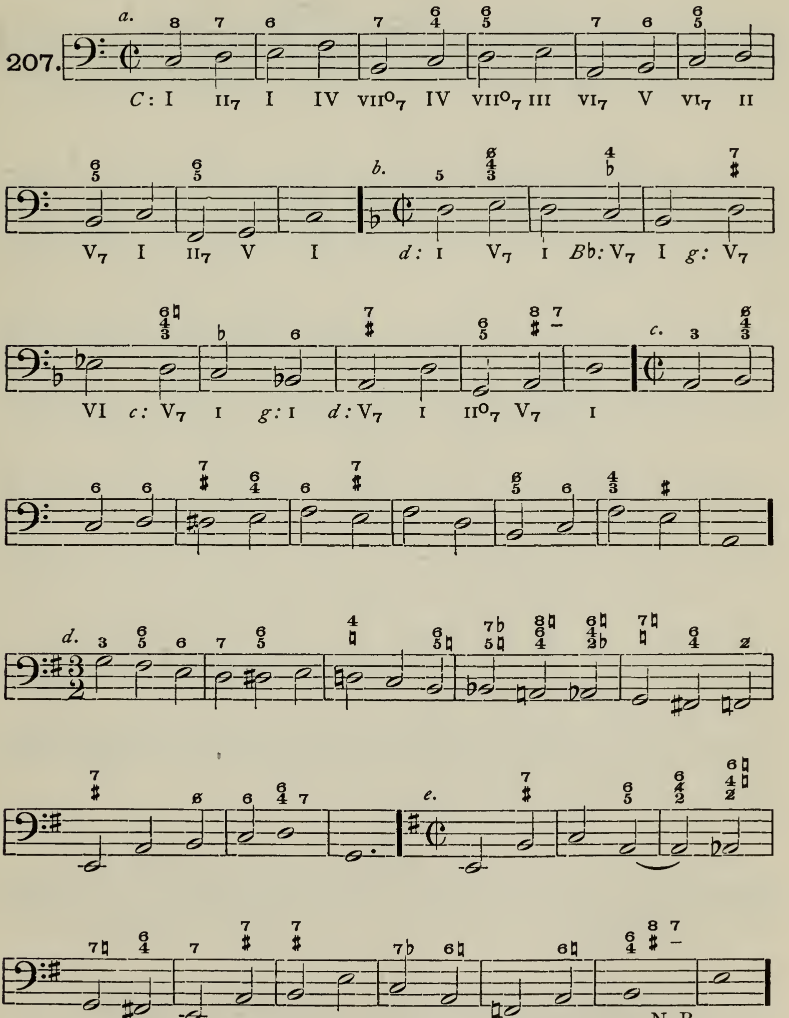


However, isolated cases are found in Examples 193 (*c*) and 205 (*f*), in which the entrance of root and seventh in parallel motion cannot be found fault with.

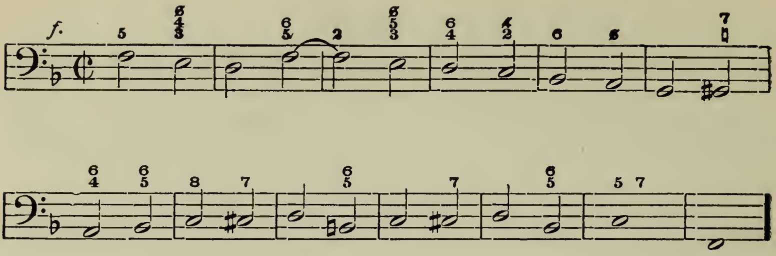
Exercises.

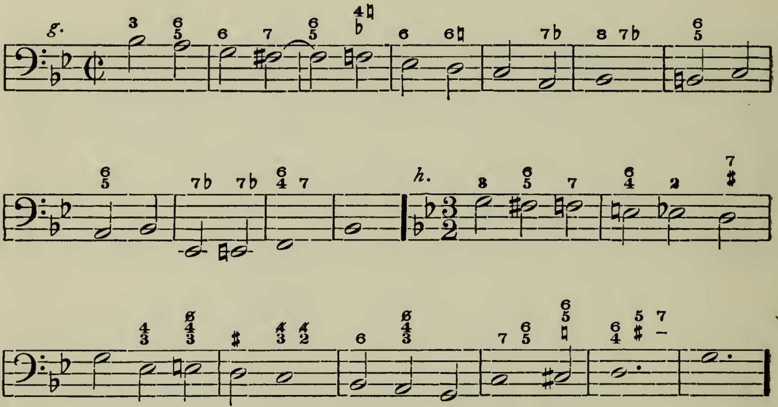
In all exercises the pupil should mark the chords by Roman numerals beneath the bass, and the course of the modulation by capital letters in major and small ones in minor, as shown in the first two exercises. (Compare also App. I, p. 255, and App. II, p. 278.)

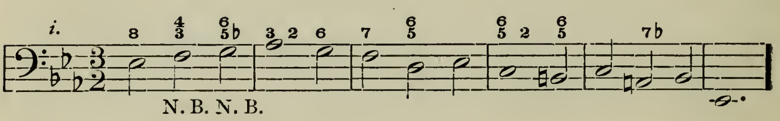
207.


a.
C: I II7 I IV VII°7 IV VII°7 III VI7 V VI7 II
V7 I II7 V I
b.
d: I V7 I Bb: V7 I g: V7
VI c: V7 I g: I d: V7 I II°7 V7 I
c.
d.
e.
N. B.

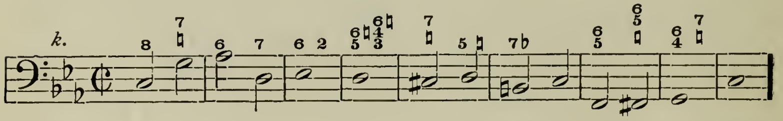
N. B. The line under the 7 shows that the sharp (♯) continues in force which is written under the 8 for the third of the dominant triad.

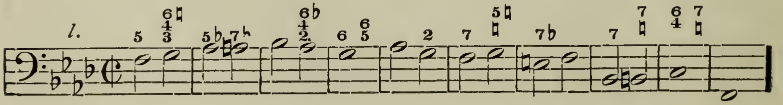




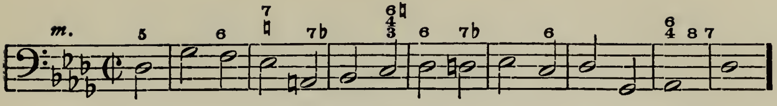


At N. B. the *Ab*, the seventh of the second chord, must skip downwards a fourth to *Eb*. This leading is correct, in spite of the entrance of the root and seventh of the chord of the fifth and sixth in parallel motion.

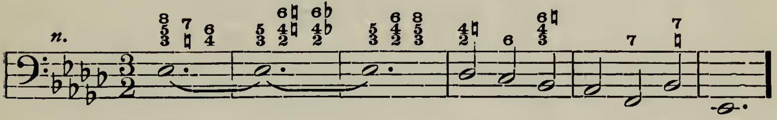




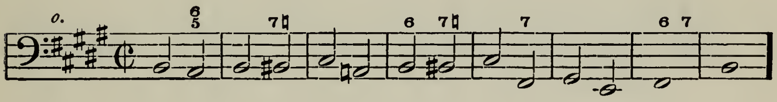
m.



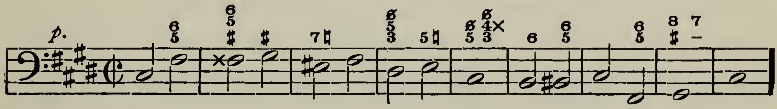
n.



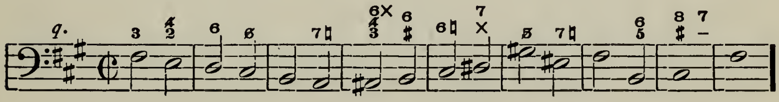
o.



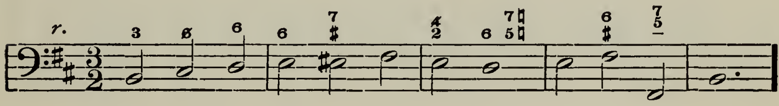
p.



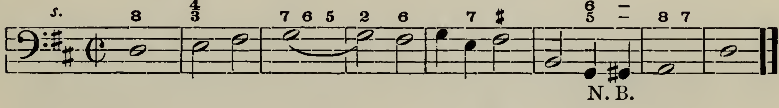
q.



r.



s.



N. B. The lines $=$ over the quarter-note *g*♯ indicate that the figures $\begin{smallmatrix}6\\5\end{smallmatrix}$ continue in force. Henceforward we shall frequently indicate the continuance of a figure by a line, even where the chords change; thus $\begin{smallmatrix}6\\5\\3\end{smallmatrix}\ \begin{smallmatrix}-\\4\\3\end{smallmatrix}$ or $\begin{smallmatrix}6\\5\\3\end{smallmatrix}\ \begin{smallmatrix}-\\4\\-\end{smallmatrix}$ calls for a chord of the fifth and sixth followed by a chord of the third and fourth.

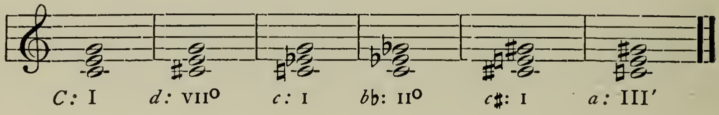
CHAPTER XIV.

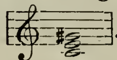
The Altered Chords.

TRIADS WITH ALTERED FIFTHS.

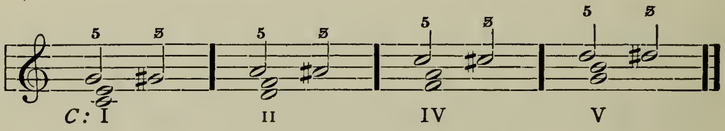
§48. We term a chord altered in which one or more tones are chromatically changed.* The chromatic alteration of a tone in a triad may change it into another triad; e. g.

210.

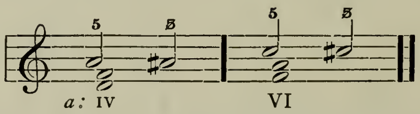


The above are chromatic alterations of the triad on the 1st degree in *C*-major; these we have already met with as natural chords. We therefore do not regard them as altered chords, with the exception of the last . This chord appears, not only as the augmented triad on the 3rd degree in *a*-minor, and but also in *C*-major as the triad on the 1st degree with altered fifth; it is employed even oftener in *C*-major than in *a*-minor. The fifth may be altered in the triads on the 1st, 2nd, 4th, and 5th degrees in major, and in those on the 4th and 6th degrees in minor.

211.



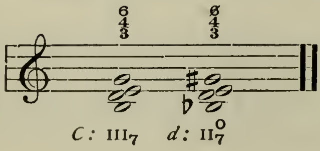
212.



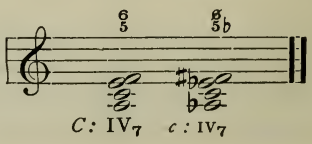
---

*There are cases in which two or three tones of a chord are chromatically altered; e. g.

208.

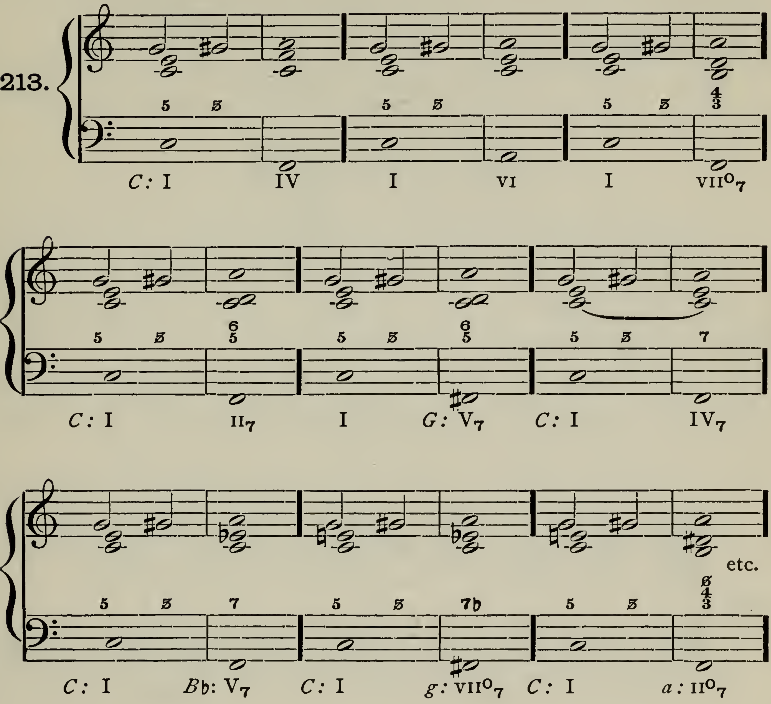


209.

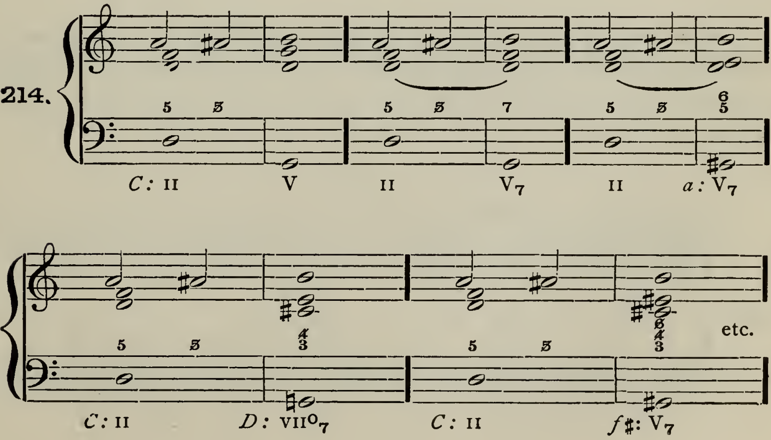


The *altered fifth* must always be led upwards by a lesser chromatic second.

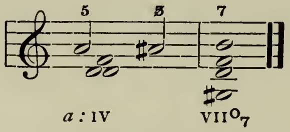
213.



214.



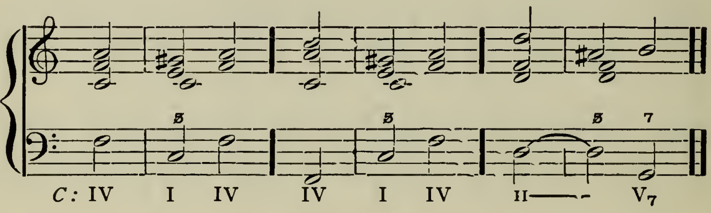
The progression of the major triads with altered fifth on the 4th and 5th degrees in major, and on the 6th degree in minor, may be effected in a way similar to that shown for the altered triad on the 1st degree (Ex. 213). The altered triad on the 4th degree in minor, whose natural progression



is to the diminished chord of the seventh on the 7th degree, may likewise progress similarly, as shown at 214.

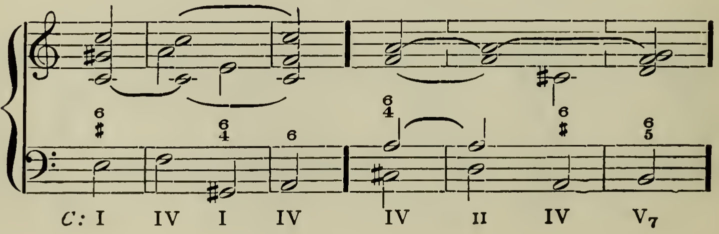
It is not necessary that the altered tone, the augmented fifth, should invariably be preceded by the natural tone, the perfect fifth. The triad with altered fifth may enter *freely*.

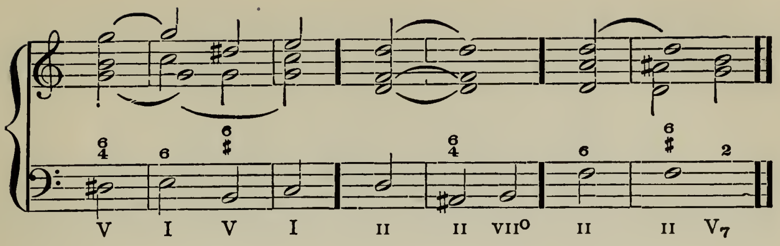
215.



The inversions of the triads with *altered fifth* are also employed, particularly those of the major triads. The minor triads on the 2nd degree in major and the 4th degree in minor, with altered fifth, occur less frequently in the form of chords of the sixth, or fourth and sixth.

216.

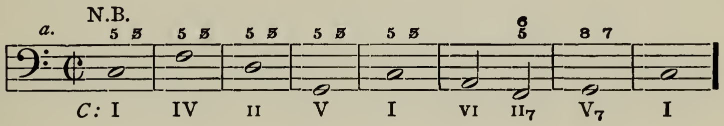




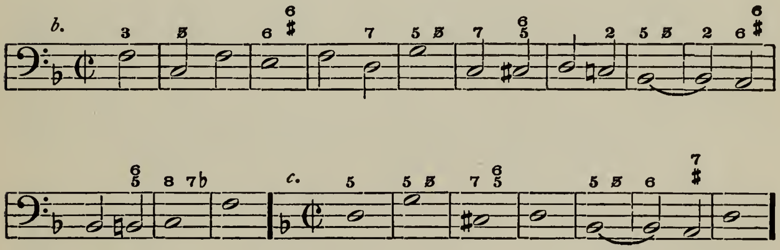
A modulation is not brought about by the introduction of an *altered triad*, although the chromatically raised fifth is a tone foreign to the predominant key. (Compare also App. I, p. 257, and App. II, p. 279.)

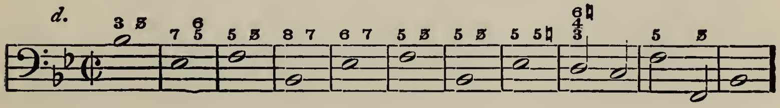
Exercises.

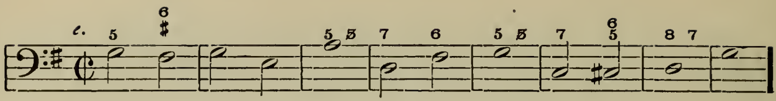
217.

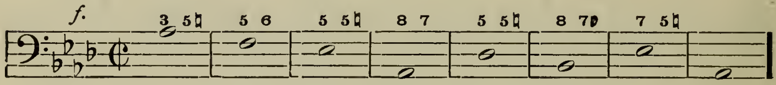


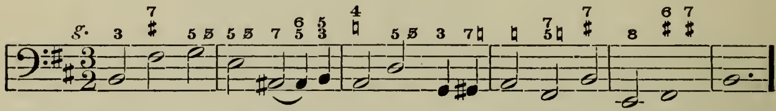
N. B. The first 5 in this measure indicates at once the position of the soprano and the natural (perfect) fifth preceding the altered fifth. Any 5 occurring in the following measures which is not crossed, indicates, in any part, the natural fifth preceding the altered one.

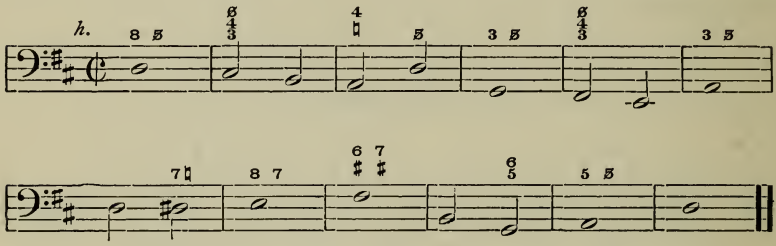






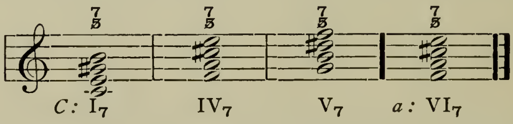






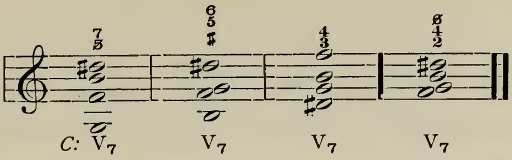
Chords of the Seventh with Altered Fifth.

§49. In the chords of the seventh on the 1st, 4th, and 5th degrees in major and on the 6th degree in minor, we may also raise the fifth by a semitone; in this case, as in all others, the altered tone must be led on upwards. Of the chords of the seventh altered in this manner

218. 

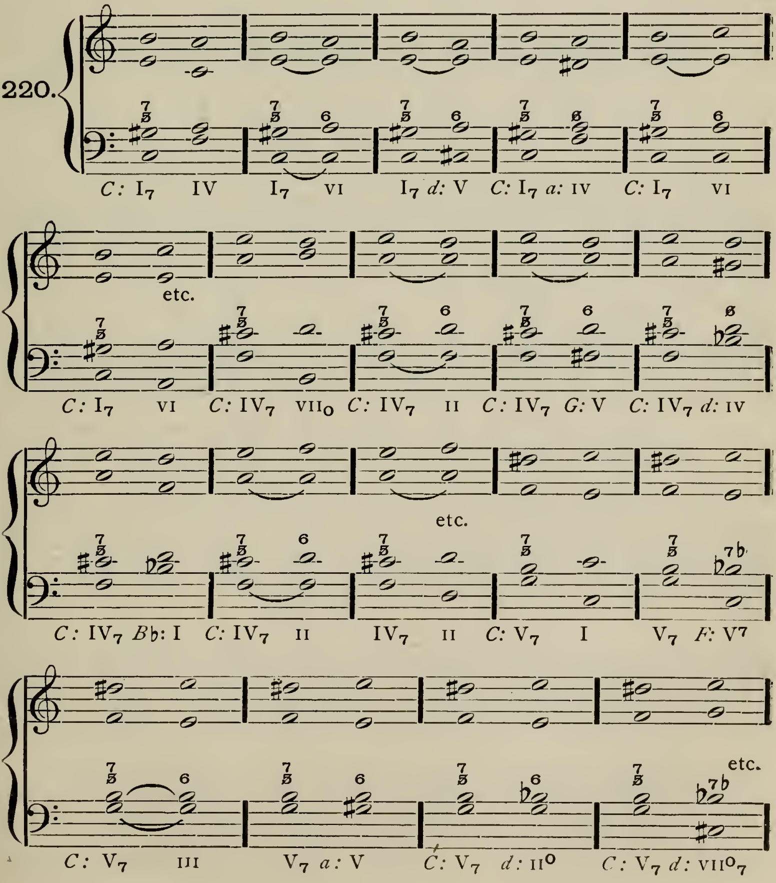
only the dominant chord of the seventh in major, however, occurs in its fundamental position and in all inversions; the chord of the third and fourth can be used but *very rarely*, and only in *open* harmony. The chord of the fifth and sixth will also be effective only in *open* harmony, and in all positions of this chord the altered fifth must be far away from the seventh. It follows, that only the chord of the second can be used both in open and close harmony.

219.



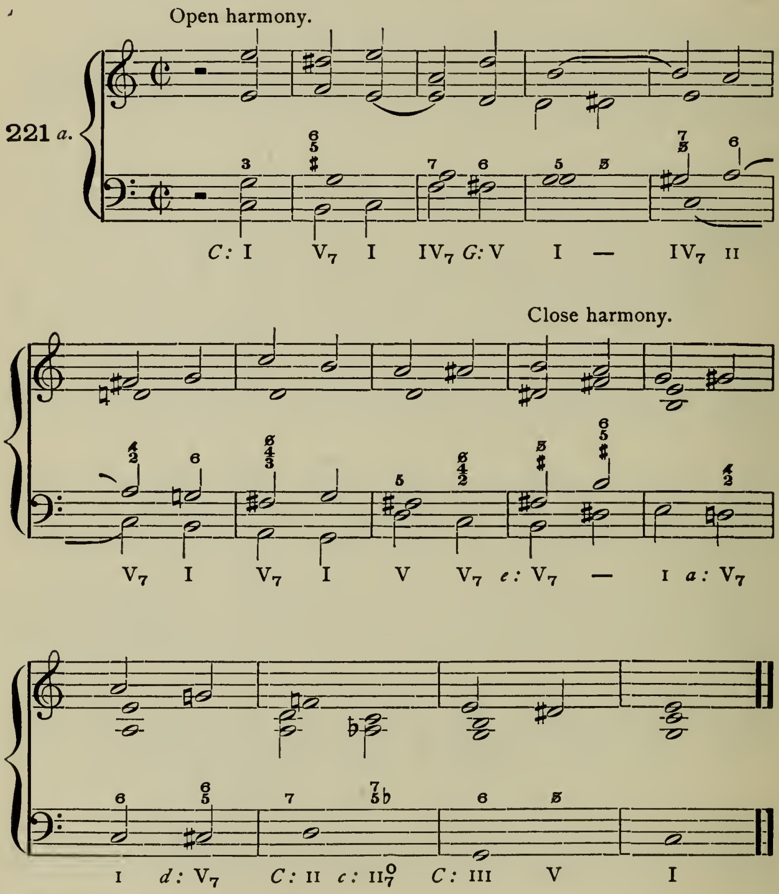
The inversions of the secondary chords of the seventh sound harsh, are difficult of introduction, and should seldom be employed. In their fundamental position all these chords are frequently employed both in cadence-like resolutions and (still oftener) in others.

220.


C: I7 IV I7 VI I7 d: V C: I7 a: IV C: I7 VI
etc.
C: I7 VI C: IV7 VII0 C: IV7 II C: IV7 G: V C: IV7 d: IV
etc.
C: IV7 B♭: I C: IV7 II IV7 II C: V7 I V7 F: V7
etc.
C: V7 III V7 a: V C: V7 d: II0 C: V7 d: VII07

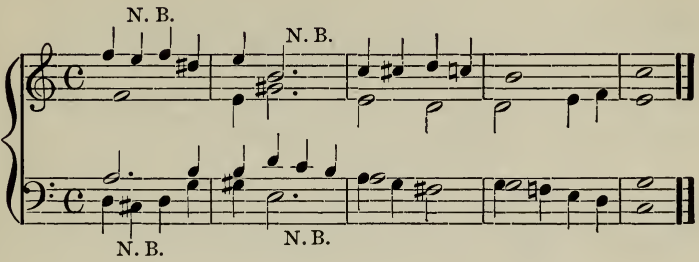
In many cases where these chords are employed it will be found necessary to write them in *open harmony* (comp. §17). But the pupil is by no means obliged to employ either open or close harmony exclusively throughout any given exercise; on the contrary, he ought, according as the leading of the parts permits, write in either harmony alternately with the other, as in the next example, which begins with *open* harmony and ends with *close* harmony.

221 *a.*


Open harmony.
C: I V_7 I IV_7 *G:* V I — IV_7 II
Close harmony.
V_7 I V_7 I V V_7 *e:* V_7 — I *a:* V_7
I *d:* V_7 *C:* II *c:* II^{o}_{7} *C:* III V I

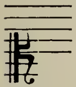
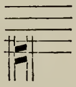
Progressions like those marked N. B. in the following Ex. 221*b*, are not to be regarded as inversions of the secondary chords of the seventh on the 4th and 1st degrees. These chord-formations will be explained to the pupil further on as accidental ones. (Comp. §57.)

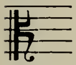
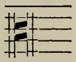
221 *b.*

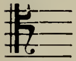
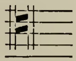


For working out the following exercises in open harmony, their notation in full score, on four staves and in four different clefs, will be found more practical than the method hitherto pursued. A knowledge of, and complete familiarity with, the so-called old clefs are, in any event, indispensable to the student of music. We therefore urgently recommend the pupil to write out all exercises twice; the first time in the violin and bass-clefs on two or (still better) four staves, and the second time under this, with the three highest parts on three separate staves in the *C*-clef. The bass is of course always written in the bass-clef, and the tenor an octave higher than sung.

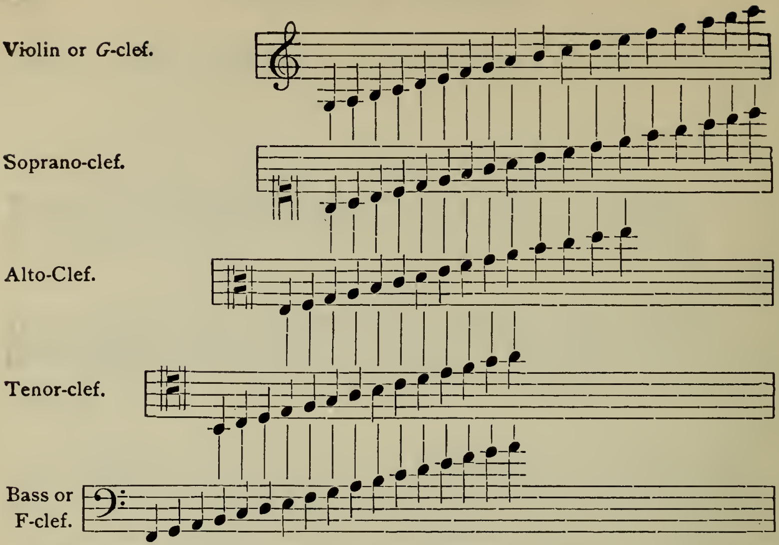
Practical illustrations of the above follow. The *C*-clef always indicates one-lined c^1 (the so-called Middle *C*), and is set for the soprano on the first line, for the alto on the third line, and for the tenor on the fourth line. Conformably to its different position on either of these lines of the staff it is called the soprano, alto, or tenor-clef.

 This sign, or this  on the first line is the soprano-clef.

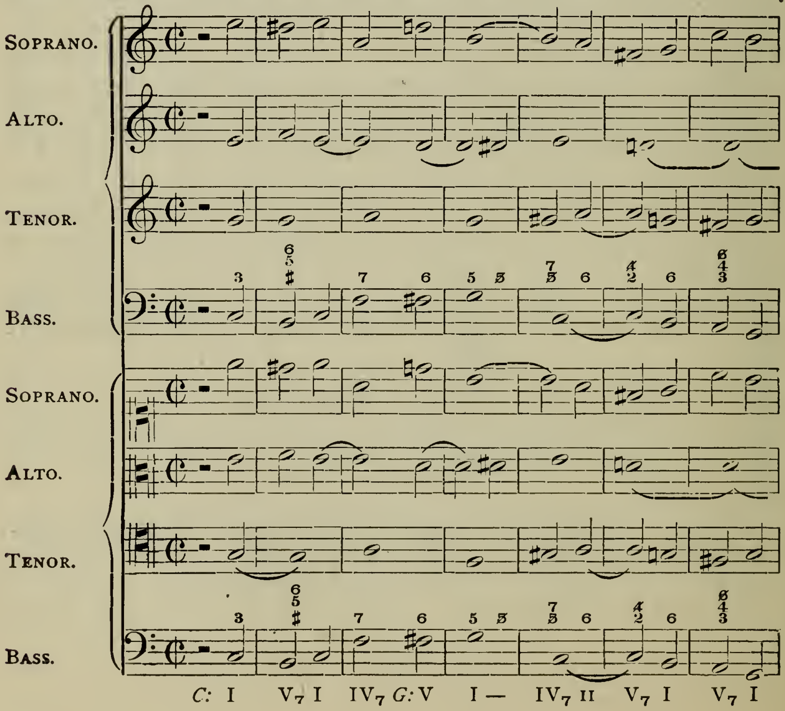
 or  on the third line is the alto-clef.

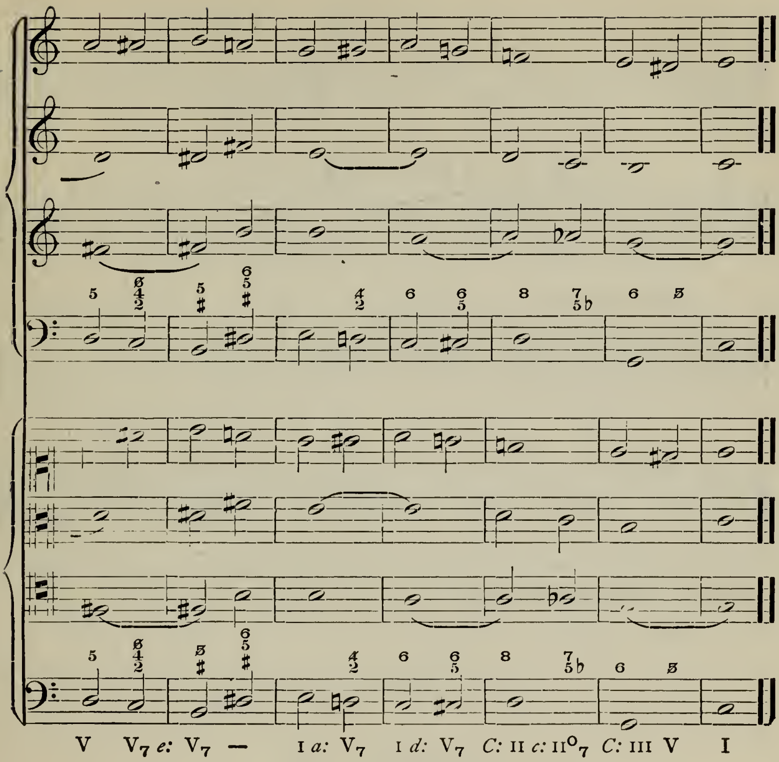
 or  on the fourth line is the tenor-clef.

To give a clearer view we add a series of notes in the old clefs, as compared with the same in the *G*-clef and *F*-clef.



Below we give Ex. 221*a* in double notation; after the pupil has written out his exercises for a time in this double notation, he will attain the skill requisite for writing in the old clefs. (For Exercises No. 222 compare App. I, p. 259, and App. II, p. 279.)

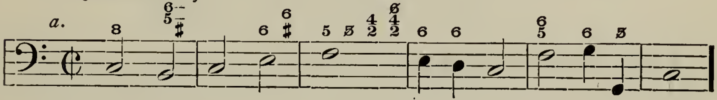




Exercises.

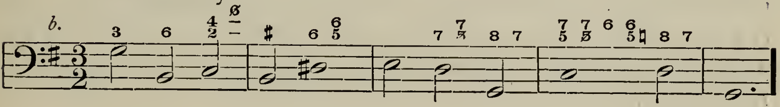
Open harmony.

222. a.



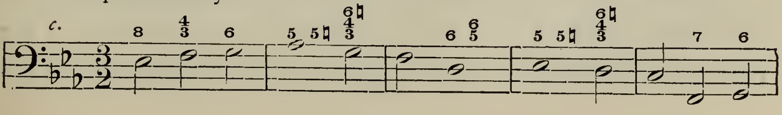
Close harmony.

b.

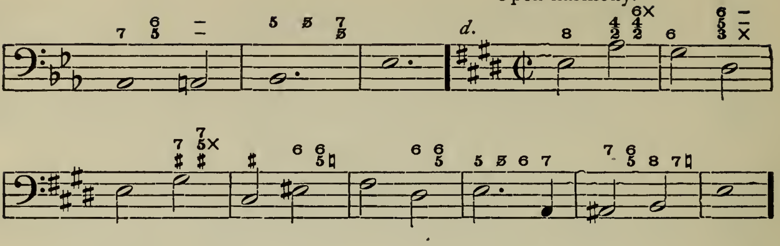


Open harmony.

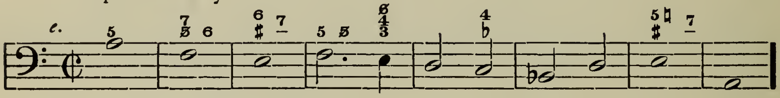
c.

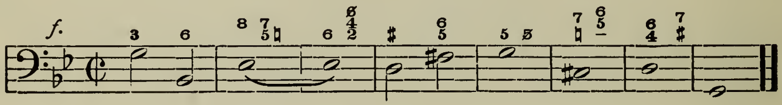


Open harmony.



Open harmony.



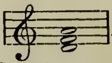
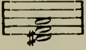
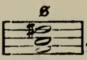


The last exercise may begin with close harmony in the first measure, but is obliged to forsake it in the second.

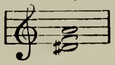
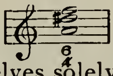
CHAPTER XV.

The Augmented Chords of the Sixth, the Third and Fourth, and the Third, Fifth and Sixth, with their Resolutions in Major and Minor.

§50. In the foregoing we chromatically raised the fifth in triads and chords of the seventh, and by so doing obtained altered chords. But we can in like manner raise the root of *one* triad and *one* chord of the seventh, and the third of *one* chord of the seventh. We alter the root of the minor triad found in two different major keys on the 2nd and 6th degrees, and on the 4th and 1st degrees of their relative minor keys.

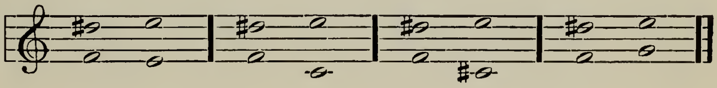
Taking the triad , situated in *C*-major on the 2nd degree, in *F*-major on the 6th, in *a*-minor on the 4th, and in *d*-minor on the 1st, we raise its root *D* to *D*♯  and find, in the chord of the sixth derived from it , the universally known and often employed triad called the

Augmented Chord of the Sixth,

with a root chromatically raised. Although the fundamental position of this chord  is occasionally employed, and also the chord of the fourth and sixth  (even more rarely), we shall for the present occupy ourselves solely with the augmented chord of the sixth and its resolution. From the latter the progressions of the chord in its fundamental position and as a chord of the fourth and sixth will be seen.

In the resolution of the augmented chord of the sixth we shall at first hold fast to the rule, that the altered tone is to be led upwards a semitone.* While leading the root downwards by a semitone or by the skip of a fourth, we lead the dissonance of the augmented sixth either to the complete consonance of the perfect octave or to the incomplete consonance of the major or minor tenth; we can, however, also lead the root, in certain cases, a step upwards to the incomplete consonance of the major sixth.

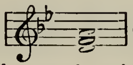
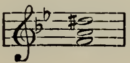
223.



As the augmented sixth must always progress a semitone upwards, it can *never* be doubled in four-part writing.

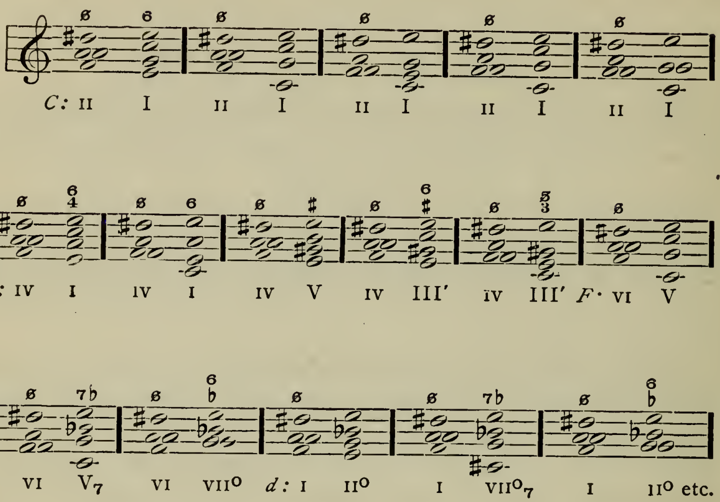
The tone best adapted for doubling in this chord is the third; the root is also frequently doubled. A few resolutions follow, such as

---

*For this reason we can employ the triad  on the 3rd degree in *B♭*-major, with an altered root, neither in its fundamental position nor as an augmented chord of the sixth. The key of *B♭*-major possesses no *E*; it is therefore impossible to lead the altered tone *D♯* up to *E*, as the resolution of the augmented chord of the sixth  requires, to another chord proper to the key of *B♭*-major.

may be effected in the various keys according as the chord is in *C* major, *a*-minor, *d*-minor, or *F*-major.

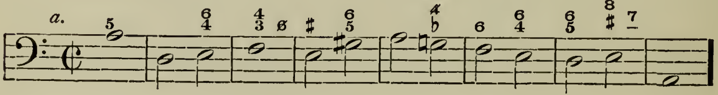
224.

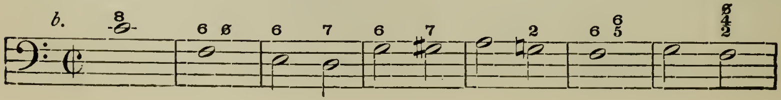

C: II I II I II I II I II I
a: IV I IV I IV V IV III′ IV III′ F: VI V
VI V7 VI VII° d: I II° I VII°7 I II° etc.

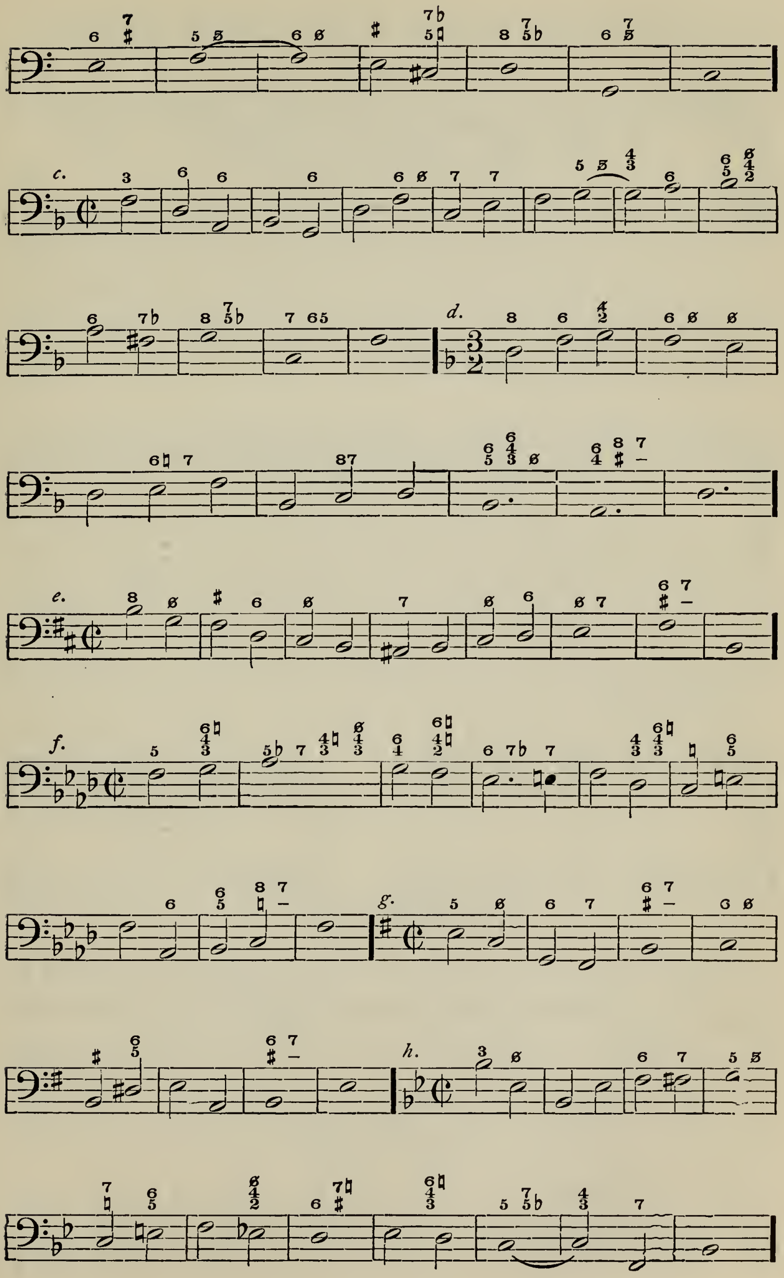
Of all these resolutions, that leading to the dominant triad of *a*-minor occurs by far the oftenest. Next in frequency is the progression to the tonic triad of *C*-major. The resolutions to the dominant chord of the seventh in *F*-major are rarer; the rarest of all are the resolutions leading to the diminished chords of the seventh and to the triad on the 2nd degree in *d* minor. But all these resolutions are defensible, and occur in practice. (Compare App. I, p. 261, and App. II, p. 279.)

Exercises.

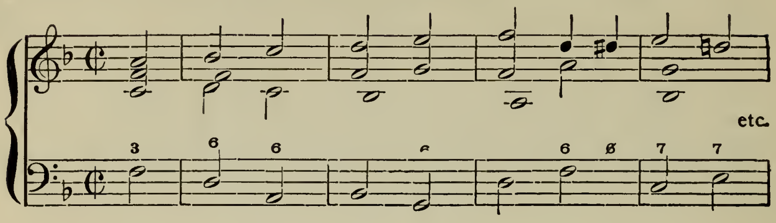
225.



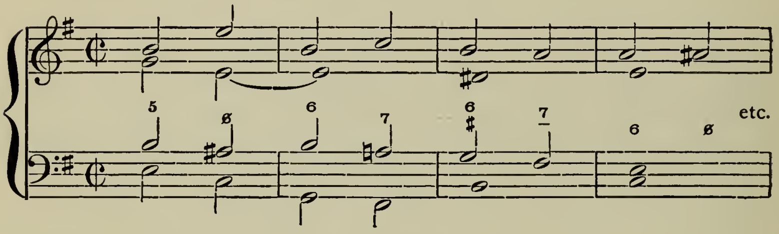



c.
d.
e.
f.
g.
h.

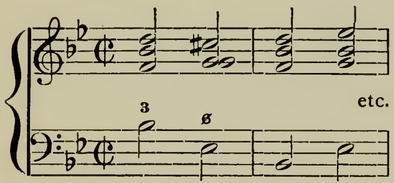
It is best to begin the third of the above exercises as follows:



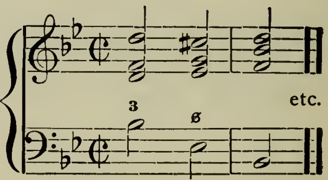
The next to the last may begin:



The last one:

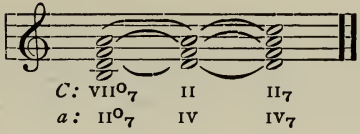


or:

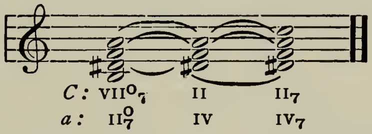


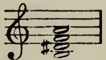
In these examples open and close harmony must be employed in alternation. Only the chord of the sixth derived from the triad with altered root is to be employed in the various resolutions; the fundamental position, and chord of the fourth and sixth, of this chord are better adapted for three-part than four-part writing, and are at any rate — as remarked above — far seldomer employed than the augmented chord of the sixth.

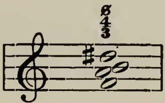
§51. By adding to the triad on the 2nd degree in major, or 4th in minor, a third either below its root or above its fifth, we obtain two chords of the seventh proper to the key (comp. §35), being those situated on the 7th and 2nd degrees in major or on the 2nd and 4th in minor.

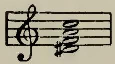
226.


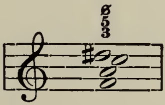
On raising by a semitone the root *D* of the triad common to the two chords of the seventh, we obtain one chord of the seventh with altered third, and a second with altered root.

227.


These two altered chords of the seventh may, it is true, be employed, both in their fundamental position and in all inversions, in the two keys to which they both belong; but in the case of the first chord of the seventh at 227, the second inversion is that most often used; and with the second chord, the first inversion. From the chord  we thus obtain the *augmented chord of the third, fourth, and sixth,*

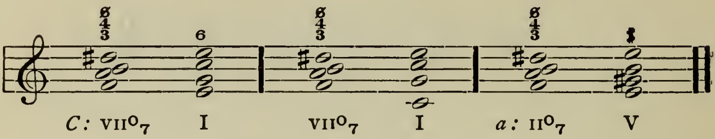


and from the chord  the *augmented chord of the third, fifth, and sixth.*

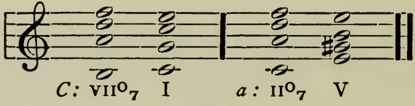


We also call the last chord, for short, the *augmented chord of the fifth and sixth.*

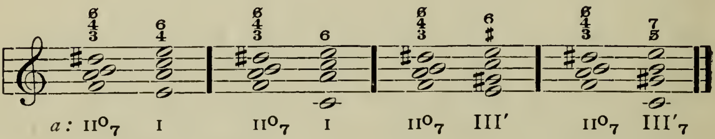
The augmented chord of the third, fourth, and sixth resolves in major to the tonic triad, in minor to the dominant triad.

228.


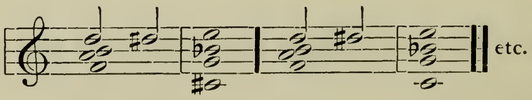
These resolutions are based on the resolutions of the natural (not altered) chords of the seventh on the 7th degree in major and the 2nd in minor (comp. §39 and §42).

229.


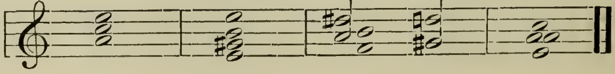
The augmented chord of the third, fourth, and sixth in minor also has other, non-cadenced resolutions; e. g.

230.


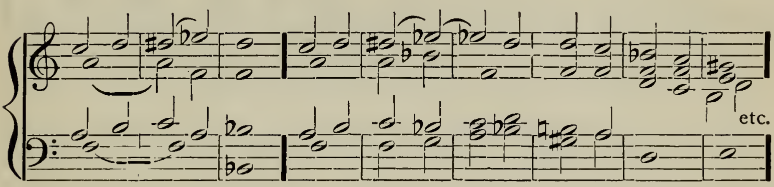
When modulation is employed, many other resolutions of this chord are possible in major and minor, in all of which, however, we must adhere to the rule, that the altered tone — especially where preceded by the natural tone — must always be led upwards.

231.


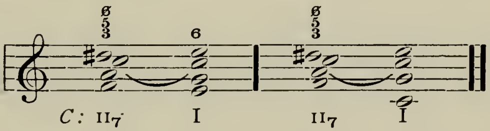
REMARK. A resolution of an altered chord of the sixth, the third, fourth, and sixth, or the fifth and sixth, effected by leading the altered tone downwards, is also possible in case the natural tone does not precede the altered one; e. g.

232.


but in view of its constrained and unnatural character such a progression can never produce a pleasing effect. From such forced progressions the pupil will perceive how correct and natural our rule is, always to lead the altered tone upwards. It can be led downwards, or held, only when it is enharmonically changed; — but then it ceases to be an altered tone; e. g.

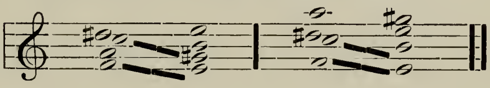


The resolution of the augmented chord of the third, fifth, and sixth in minor is effected, like that of the augmented chord of the third, fourth, and sixth, to the tonic triad:

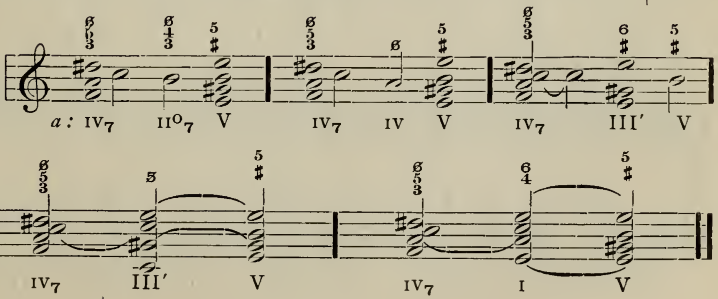
233.


In minor, this chord can never resolve directly to the dominant triad. But as the dominant triad is the chord to which the augmented chord of the fifth and sixth naturally resolves, we make use of various devices to avoid the parallel fifths arising from a direct resolution.

Direct and Incorrect Resolutions.

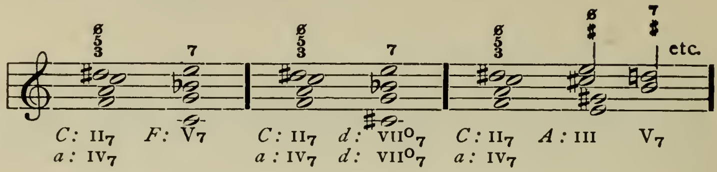
234.


Indirect Resolutions.

235.


By employing modulation, still further resolutions of this chord may be effected in major and minor:

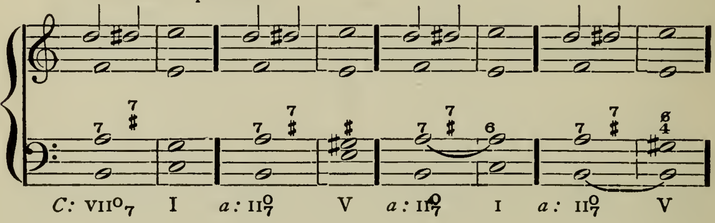
236.


etc.
C: II7 F: V7 C: II7 d: VII°7 C: II7 A: III V7
a: IV7 a: IV7 d: VII°7 a: IV7

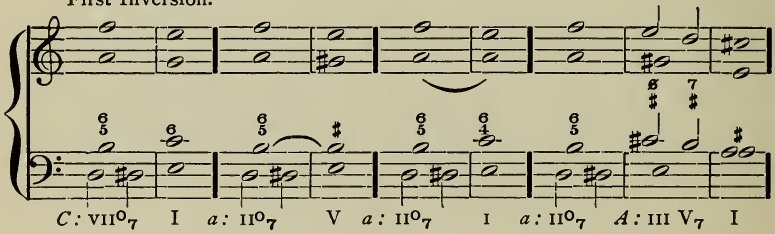
We observed above, that the fundamental position and the other inversions of the augmented chords of the third and fourth, and the fifth and sixth, also occur in practice. The resolutions remain the same as those of the augmented chords of the third and fourth, and of the fifth and sixth. A few such follow here. (For Ex. 239, also comp. App. I, p. 262, and App. II, p. 281.)

237.

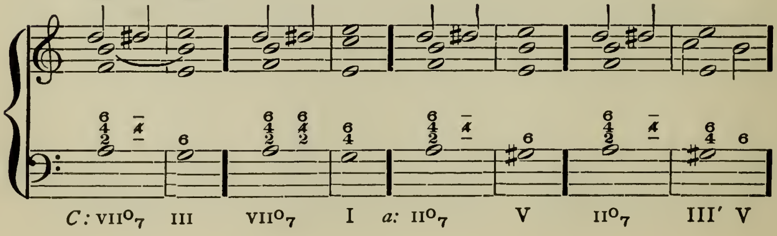
Fundamental position.



First Inversion.

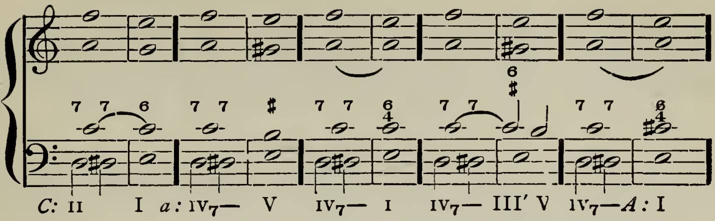


Third Inversion.

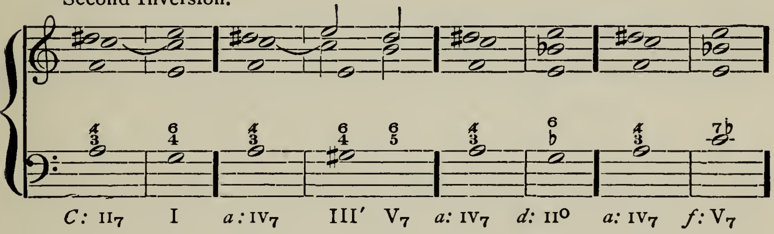


238.

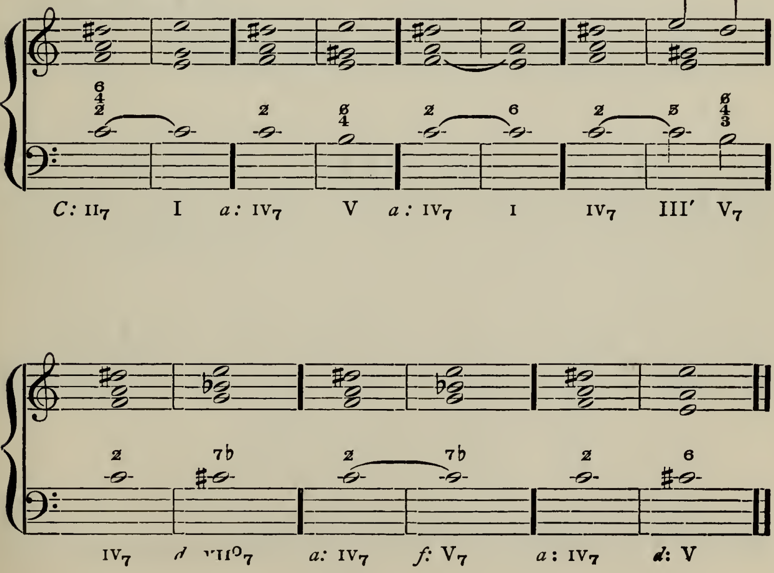
Fundamental position.



Second Inversion.



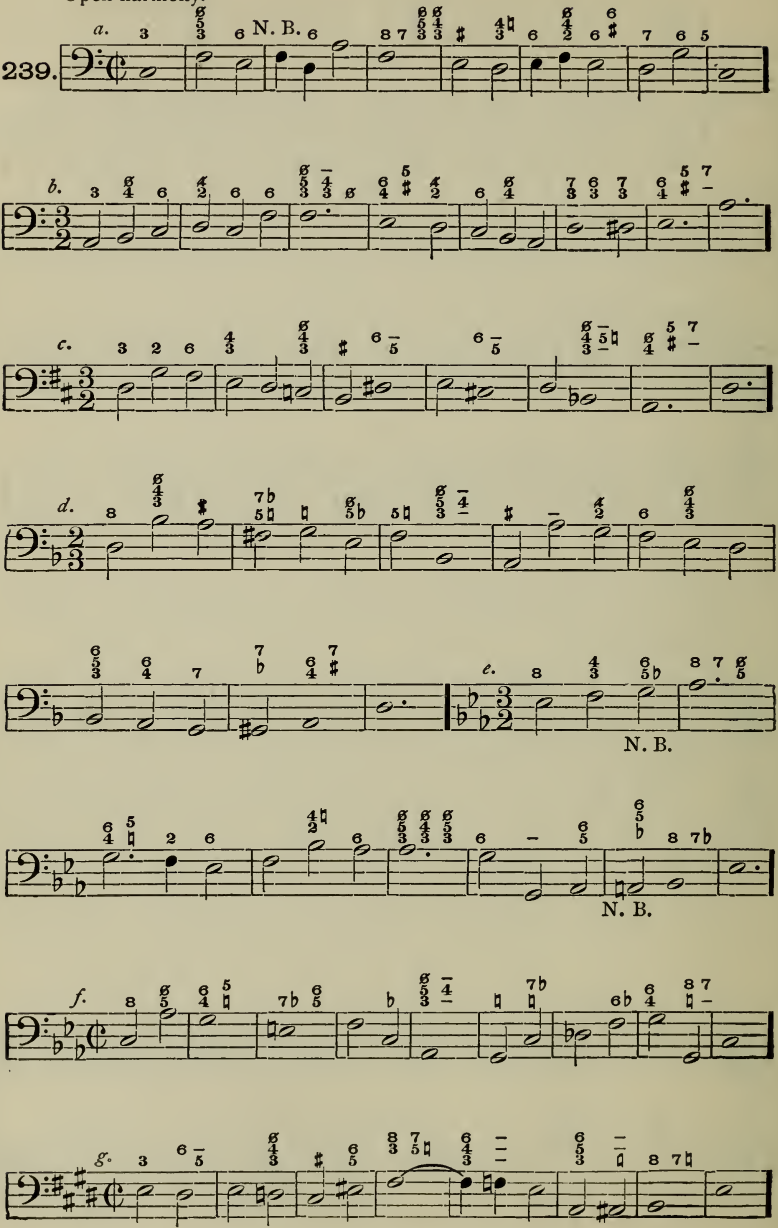
Third Inversion.


6 4 2 2 6 4 2 6 2 5 6 4 3
C: II7 I a: IV7 V a: IV7 I IV7 III′ V7
2 7♭ 2 7♭ 2 6
IV7 d: VII°7 a: IV7 f: V7 a: IV7 d: V

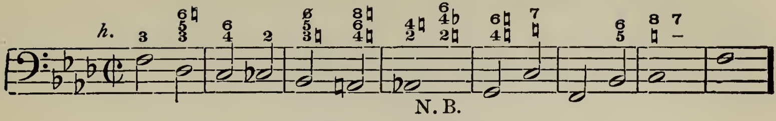
Exercises.

Open harmony.

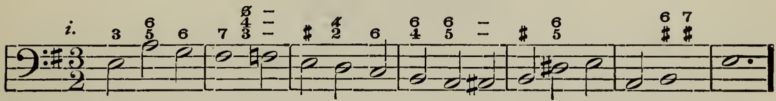
239.



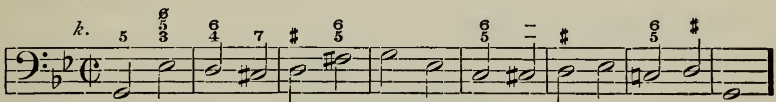
h.



i.



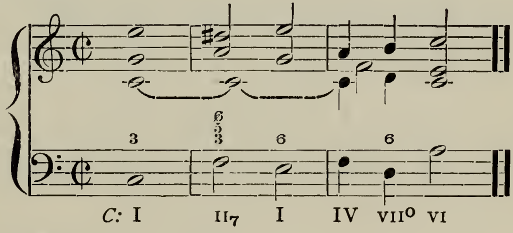
k.



Remarks on the Above Exercises.

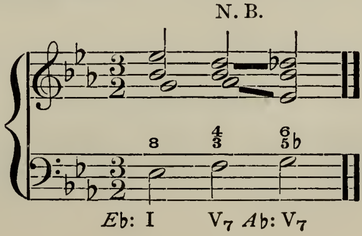
It is best to begin the first exercise in open harmony, which is therefore specially marked. At N. B. in measure 3 the soprano skips downwards a fifth. The beginning should be thus:

239 *a.*

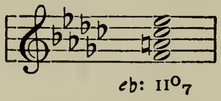


This gives rise to the following remark:

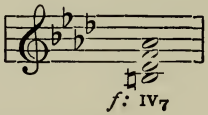
The leading of one or two parts by a skip is also practicable where not simply the transposition of one and the same chord comes in question, provided that the leading of the parts is otherwise good and natural. The effect of such a skip is best, when either some other part progresses in contrary motion, or one or two parts are held. In Ex. 239 *e*, meas. 1, the tenor taking the seventh of the second chord must skip downwards at N. B. by a fourth. Both this skip, and the simultaneous entrance of the root and seventh in parallel motion, are perfectly covered by the contrary motion of the bass.



At N. B. in the last measure but one the chord of the fifth and sixth is derived from the chord of the seventh on the 2nd degree (with altered third) in *e♭*-minor.



At N. B. in Ex. *h*, the chord of the second on *A♭* is to be derived from the chord of the seventh on the 4th degree (with root chromatically raised) in *f*-minor.



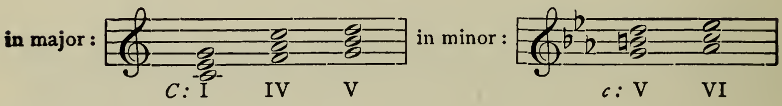
(Comp. Examples 237 and 238.)

At the close of this chapter, which is likewise the close of the first Part of this Manual, we now give a view of all the chords which we have learned and employed. These are

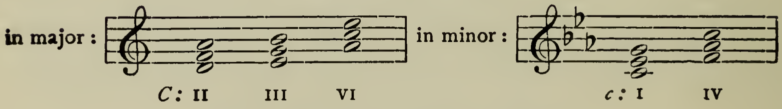
I. Fundamental Chords.

A. Triads in Major and Minor.

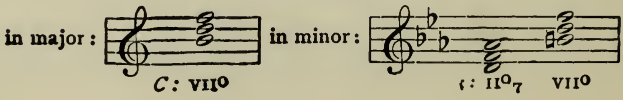
a. Major Triads.



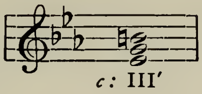
b. Minor Triads.



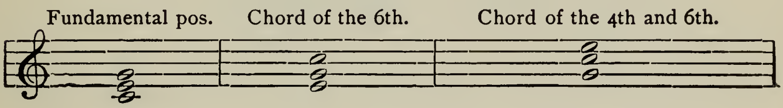
c. Diminished Triads.



d. The Augmented Triad in Minor.

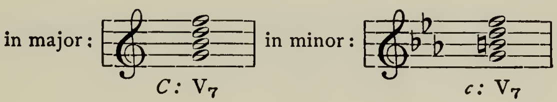


Inversions of all these triads as chords of the sixth and of the fourth and sixth may occur.



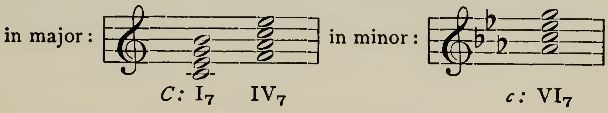
B. Chords of the Seventh.

a. The Dominant Chord of the Seventh.

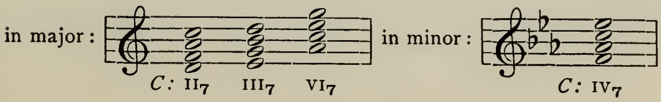


This chord is always composed of a major triad with minor seventh, is found on the 5th degree, and is alike in major and minor.

b. Secondary Chords of the Seventh, Having a Major Triad and a Major Seventh.

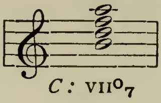


c. Secondary Chords of the Seventh, Having a Minor Triad and Minor Seventh.

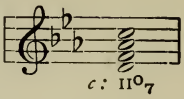


d. SECONDARY CHORDS OF THE SEVENTH, HAVING A DIMINISHED TRIAD AND MINOR SEVENTH.

in major:

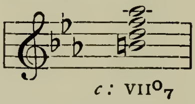


in minor:



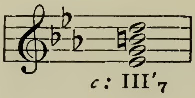
e. DIMINISHED CHORD OF THE SEVENTH, HAVING A DIMINISHED TRIAD AND DIMINISHED SEVENTH.

only in minor:



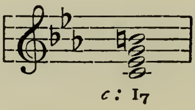
f. SECONDARY CHORD OF THE SEVENTH, HAVING AN AUGMENTED TRIAD AND MAJOR SEVENTH.

only in minor:

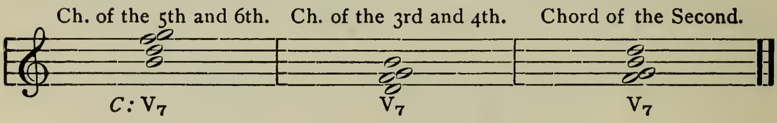


g. SECONDARY CHORD OF THE SEVENTH, HAVING A MINOR TRIAD AND MAJOR SEVENTH, (BUT LITTLE USED, AND THEN IN ITS FUNDAMENTAL POSITION.)

only in minor:



INVERSIONS OF THE CHORDS OF THE SEVENTH.

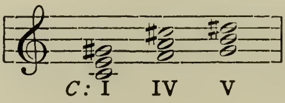


II. The Altered Chords.

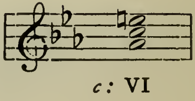
A. TRIADS WITH ALTERED (CHROMATICALLY RAISED) FIFTH.

a. MAJOR TRIADS.

in major:

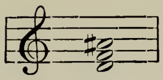


in minor:

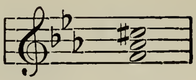


b. Minor Triads.

in major:

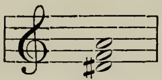


in minor:

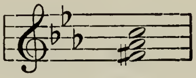


Triad with Altered Root.

in major:



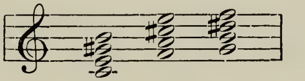
in minor:



Used especially as a chord of the sixth.

B. Chords of the Seventh with Altered (Chromatically raised) Fifth.

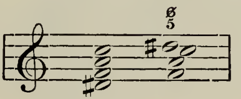
only in major:



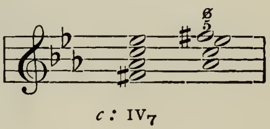
Secondary Chord of the Seventh with Altered Root.

Oftenest used as a Chord of the Fifth and Sixth.

in major:



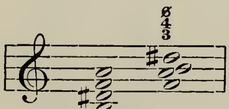
in minor:



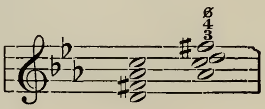
Chord of the Seventh with Altered Third.

Oftenest used as a Chord of the Third, Fourth and Sixth.

in major:



in minor:



PART THE SECOND.

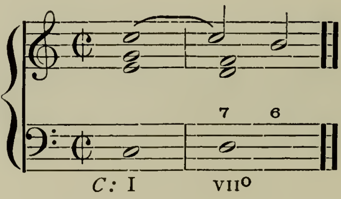
CHAPTER XVI.

On Suspensions.

§52. In the progressions hitherto exhibited, the parts always moved forward simultaneously from the tones of one chord to those of the next. But if, on the progression of one chord to another, one part holds a tone of the first chord while the other parts progress to the tones of the new chord, the part so held then progressing alone to its proper interval in the latter, the tone thus retarded produces a *suspension*.

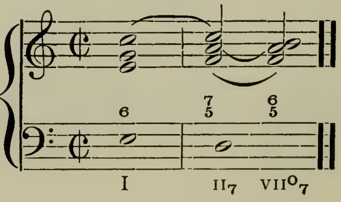
The peculiar nature of a suspension consists in its forming a *dissonance* to a chord which is not classed among the *dissonant chords*, and does not exhibit *completely in all its intervals* the form of any of the dissonant dependent chords which we have as yet learned. We must therefore regard the following progression of the triad on the 1st degree to that on the 7th as a progression retarded by suspension, because the chord of the seventh on the 2nd degree does not appear in its *complete* form on the strong beat; the *fifth* of the chord of the seventh is wanting.

240.



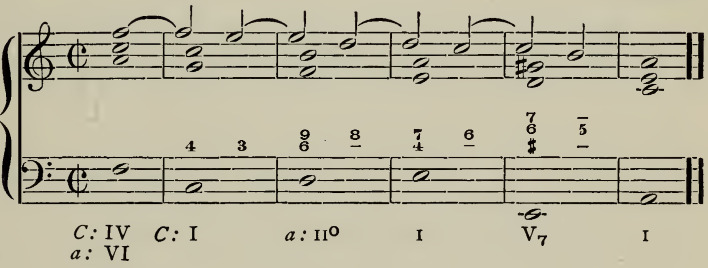
Contrarily, Ex. 241 shows a succession of two chords of the seventh.

241.



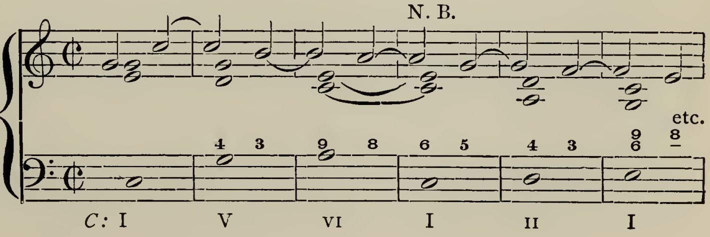
Remark. Even assuming that the *D – F – C* in the second measure of Ex. 240 were to be regarded as a chord of the seventh with omitted fifth, this distinction would make no difference in practice. Both seventh and suspended note are dissonant intervals, and are subjected to like conditions; both must be prepared, and both must be resolved. The essential conditions of a suspension are fulfilled in Ex. 240; and *in order not to confuse the pupil* we must term any forms *suspensions* which do not exhibit, *completely and in all their intervals*, some familiar form of chord. Many years' experience in teaching confirms our practice of not explaining in detail, at the *beginning* of the course, matters of slight importance in later practical work (as the similarity in sound between the augmented and altered chords, or incomplete chords of the seventh and suspensions), but rather to explain each point quite apart from the rest. Later maturity of experience will give the pupil the insight necessary to distinguish what points such phenomena have in common, and which are peculiar to them. We shall return to this question when we take up the Means of Modulation.

242.



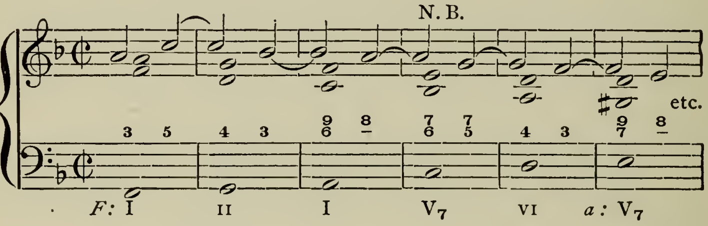
Ex. 242 shows a number of suspensions forming sharp dissonances to the chord entering on the second beat. Cases may also occur, however, in which the progression of two independent chords may assume the character of a suspension, although no dissonance, properly speaking, is formed. This happens most frequently when such a progression occurs in the midst of a sequence of suspensions, e. g.

243.



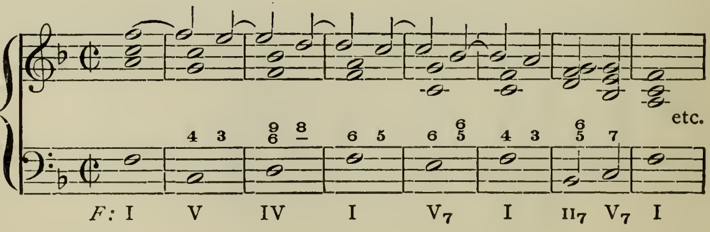
At N. B. in meas. 4 the soprano is to be considered a suspension, although we might analyze the chord on the strong beat of this measure as the chord of the sixth derived from the triad on the 6th degree in *C*-major, and though the soprano in no way forms a dissonance to the other parts. By its position here in the midst of other genuine and unimpeachable suspensions the progression in the fourth measure takes on the character of a suspension, and produces just here an effect similar to that which a true dissonant suspension would produce; e. g.

244.



The reason why certain non-dissonant progressions in the midst of a number of suspensions assume the character of suspensions and are to be considered as such — though not exhibiting the essential characteristic of the suspension, the dissonance — is easy to discover. In the preceding suspensions we first heard the finished chord on the second beat, and consequently expect in the following progressions, which are formed in like manner, not to hear the actual fundamental chord until the second beat. Thus the chord on the first beat, although not dissonant, is felt merely as a retardation of the principal chord, which, in conformity with the preceding measures beginning with suspensions, we expect on the second beat. The following Ex. 245 contains two such progressions side by side in measures 4 and 5.

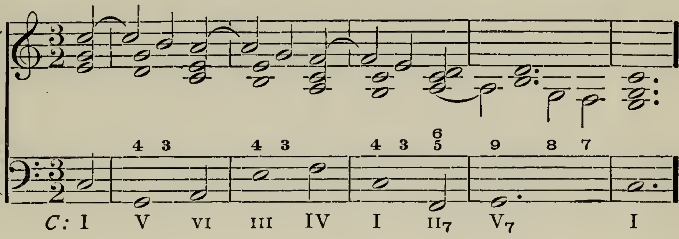
245.



§53. For the introduction and resolution of suspensions we give the following 5 rules.

1. The suspension (whether in duple or triple rhythms) usually enters on the *strong* (first) *beat.*

246.



2. The suspension must be *prepared* in the same part in which it enters.
3. The tone of resolution (i. e. that interval of a chord whose entrance is retarded by the suspension) must be doubled in no other part excepting the bass; when the suspension lies in the bass itself, the tone of resolution must be doubled in none of the other parts.
4. The suspension must be resolved on the *weak* (second or third) *beat*, and in downward progression.
5. A suspension does not neutralize parallel octaves which it merely retards.

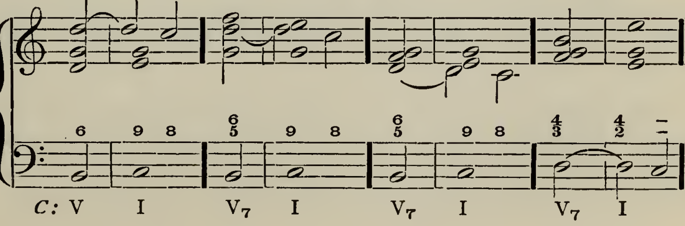
REMARK. The few cases in which a suspension can be resolved upward will be discussed further on.

Preparation (as explained in the case of the seventh) must begin on the weak (second) beat, and be of at least as long duration as the suspension itself.

Suspensions may occur before the third and before the octave (of the root) in the triad, in all the parts.

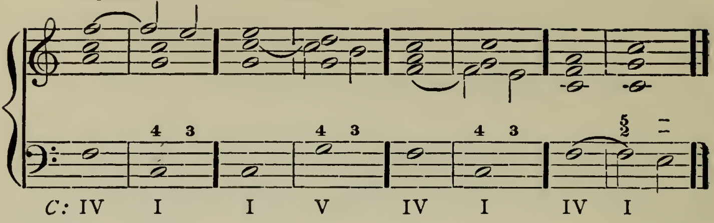
Suspension before the *octave* of the *root.*

247.

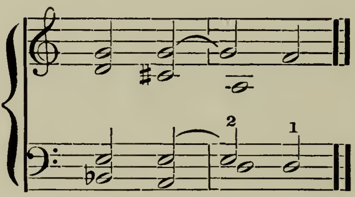


Suspension before the *third.*

248.

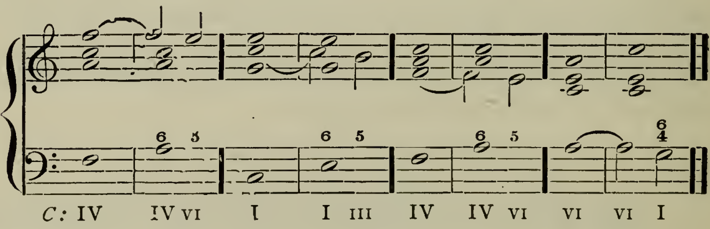


Remark. Between the tenor and bass there also occasionally occurs a suspension of the second before the prime (2 1). The explanation is simple, the range of the bass not being low enough in a vocal chorus to form the proper suspension 9 8.



A true suspension cannot be formed before the fifth of a triad. Progressions like those below at 249 may, to be sure (as shown in Examples 243 and 245), assume the character of suspensions in the midst of a number of real suspensions, but when alone do not have the effect of suspensions.

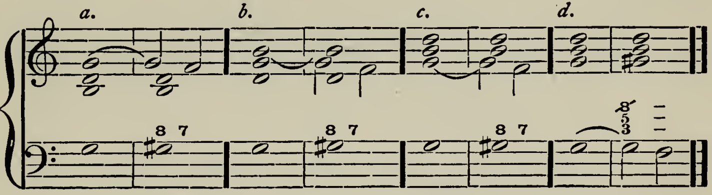
249.



These progressions, which — as the figures below them prove — are all complete chords with all their intervals, lack the essential feature of the suspension, the *dissonance.*

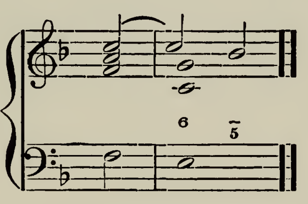
Before the fifth of a chord of the seventh, however, a suspension may occur as well as before its root or third. Before the seventh a suspension may occur *solely in case* it is preceded by a diminished octave or (as at 250 *d*) by an augmented one.

250.



A perfect octave preceding a seventh can never form a suspension; nevertheless, even the following progression

251.

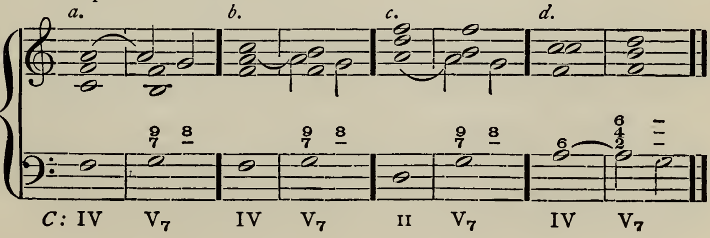


may in very exceptional cases (like that given in Ex. 245, meas. 5) assume the appearance of a suspension.

Suspensions before the Octave of the Root, the Third, and the Fifth of the Chord of the Seventh.

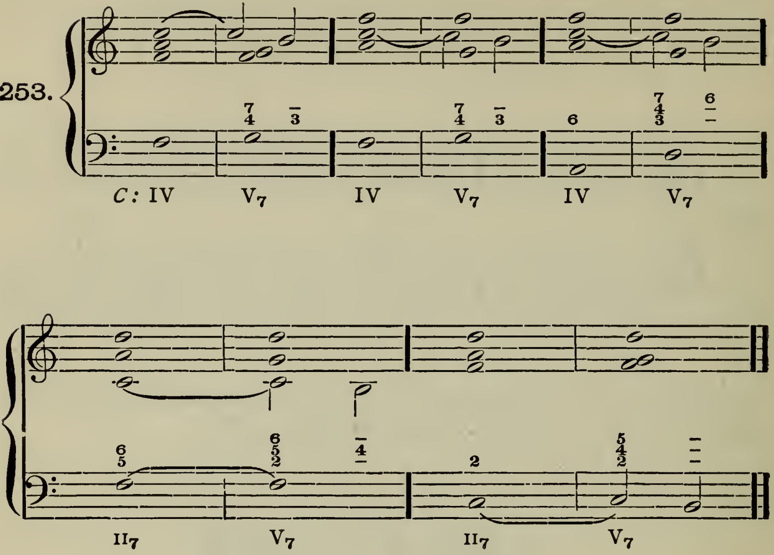
Suspension before the *octave.*

252.



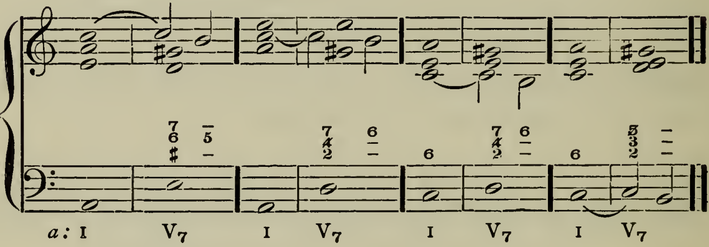
Suspension before the *third.*

253.



Suspension before the *fifth.*

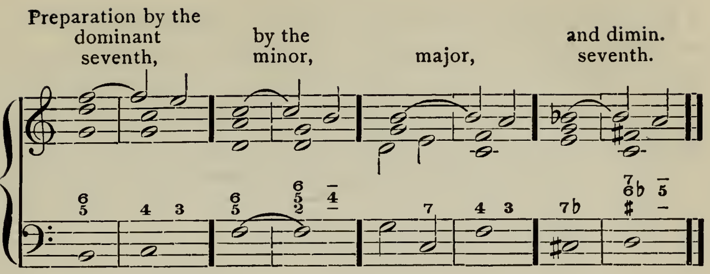
254.



All these suspensions may also be employed with the secondary chords of the seventh.

Any interval of a triad or chord of the seventh may be employed to prepare a suspension ; but the diminished seventh is least, and the dominant seventh best, adapted for this purpose. In fact, *minor* sevenths are in general better adapted for preparing suspensions than major sevenths.

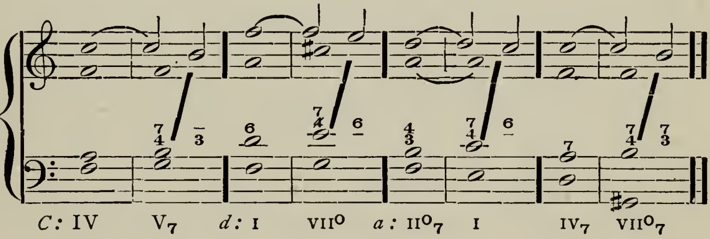
255.



Ex. 242 to 254 inclusive contain preparations of suspensions by the octave of the root, the third, and the fifth, in triads and chords of the seventh; it is therefore unnecessary to repeat such examples here. The pupil should, however, again examine the examples in question, that he may clearly understand preparation by means of the various intervals of the triad and chord of the seventh.

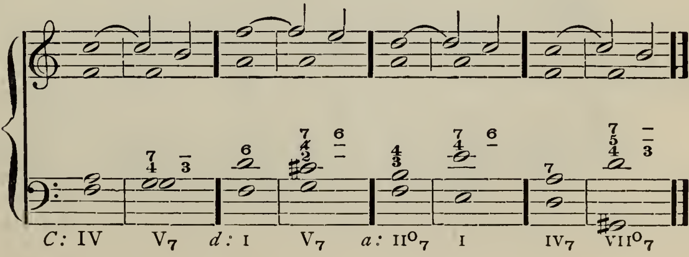
As the third rule to be observed in suspensions we remarked above, that the tone of resolution in a suspension must be doubled in no tone but the bass, and, in case the suspension is in the bass itself, none of the higher parts may double the tone of resolution so long as the latter is itself not resolved. All the following examples are bad.

256.



This faulty example now follows in corrected form.

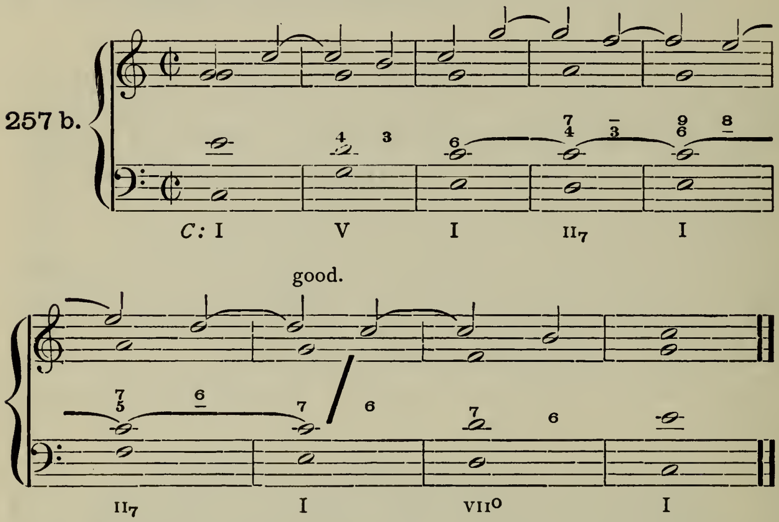
257 a.



In but *a single exceptional case* is it permissible for an inner part in a sequence of suspensions to double the tone of resolution in a suspension, namely, when this tone of suspension is the root of the tonic triad (or of some other fundamental triad of the key). But this root must be

1. Already prepared (present) in the inner part in question, and
2. Remote from the suspension.

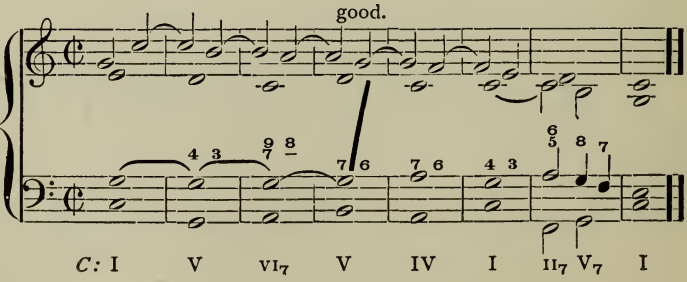
257 b.



REMARK. The part already holding the root (in this case, as in Ex. 257 *c* and 257 *d*, the tenor), has the character of a held part, consequently the suspension is permitted.

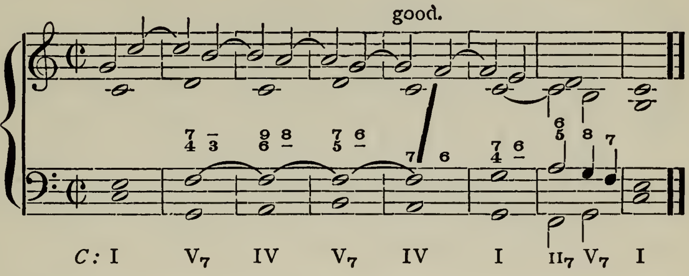
Here we also give an example of a suspension before the root of the dominant triad, which is present and thus prepared in the tenor within a sequence of suspensions.

257 c.



This form of suspension occurs less frequently with the triad of the subdominant, but it *can* occur under certain conditions, as Ex. 257 *d* shows.

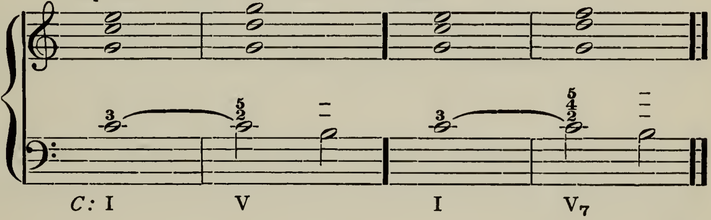
257 d.



§54. Suspensions in the bass usually occur only before the *third* of a chord, seldom before the *fifth* of a *chord of the seventh*, and still more rarely before the *root* of a triad or of a chord of the seventh. In the last case they form, before the triad, an incomplete chord of the second with omitted fifth, and before the chord of the seventh a chord of the second with all its intervals, thus always having a double significance.

Suspension before the *third* in the Bass.

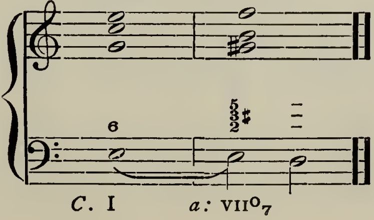
258.



The chord of resolution must then necessarily be a chord of the sixth or of the sixth and *fifth*.

Suspension in bass before *fifth*,
in chord of the seventh.

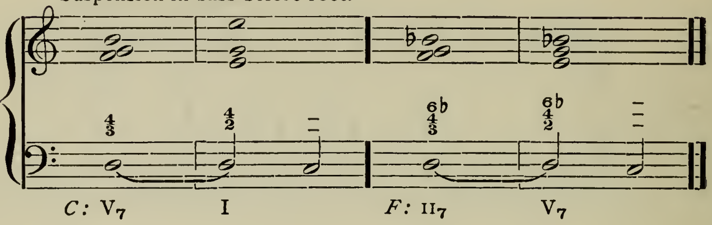
259.



The chord of resolution must always be a chord of the third, fourth, and sixth.

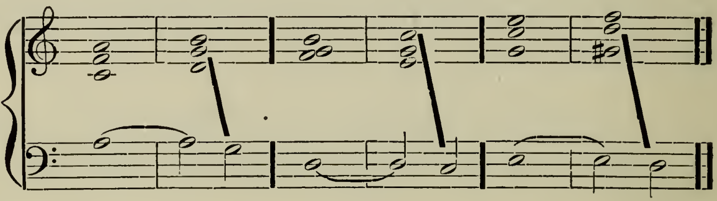
Suspension in bass before root.

260.



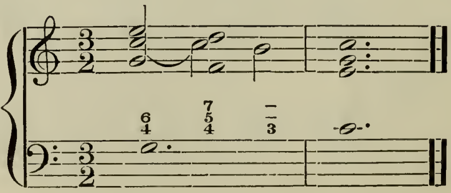
Suspensions in the bass, with the tone of resolution doubled by one of the highest parts, are entirely unallowable in *strict* writing. All the suspensions at 261 are incorrect.

261.



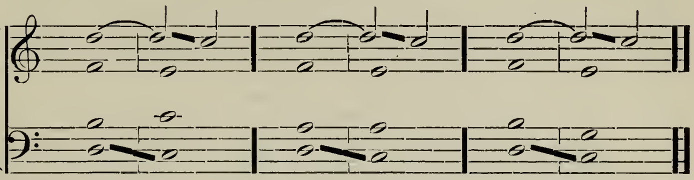
The pupil should observe, in studying Ex. 258, 259, and 260, how the anticipation of the tone of resolution in any of the higher parts may be *avoided*.

In all foregoing examples in duple rhythm we have seen, that the suspension always enters on the strong beat. The same principle must also be adhered to in triple rhythm, as Ex. 246 showed; but in triple rhythm exceptions sometimes occur, e. g.



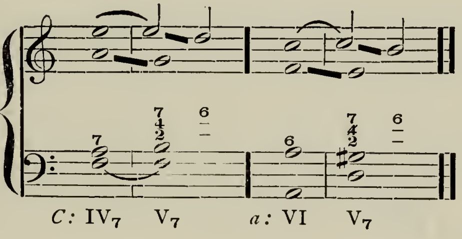
A suspension does not neutralize parallel octaves which are merely retarded by it, consequently Ex. 262 is wrong.

262.



On the other hand, a *genuine dissonant* suspension completely neutralizes parallel fifths retarded by it between all parts, even between neighboring parts, in case the leading of the other parts is otherwise correct.

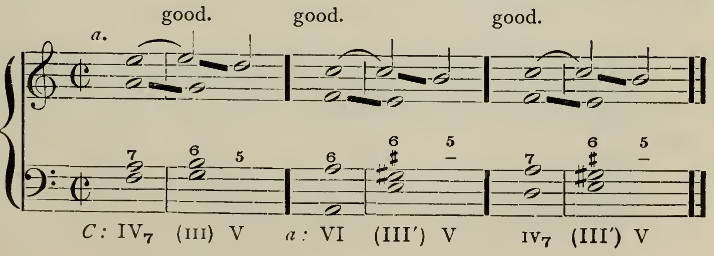
263.



The suspensions of retarded parallel fifths exhibited at 263 are *correct*, although the retarded fifths occur between neighboring parts. Similar progressions have been written by the best classic authors in strict four-part composition.

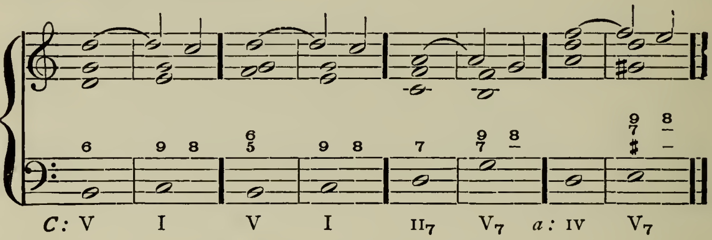
Even in progressions bearing the character of suspensions, retarded parallel fifths are allowable, especially with contrary motion in the other parts, the unpleasant effect of the open fifths being completely neutralized, partly by the retardation of one part, partly by the suspension-like character of the chord, and in particular by the contrary motion in other parts.

264.



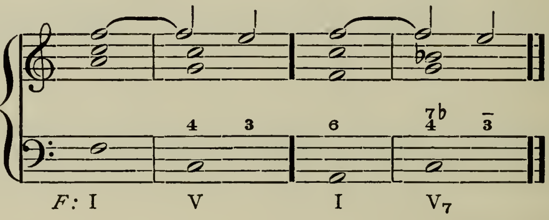
But little is left us to say concerning the manner of marking the suspension in thorough-bass notation; this the pupil will have learned already from the foregoing examples. The suspension is indicated above the bass note by the figure of its interval to the bass note; e. g. we indicate the suspension of the *ninth* before the octave of the root by the figures 9 8.

265.



We usually mark the suspension of the fourth before the third of the triad simply with 4 3, because the triad needs no special figuring in its fundamental position. In a chord of the seventh we give, for the suspension of the fourth before the third, the figures $\substack{7\\4}\ \substack{-\\3}$:

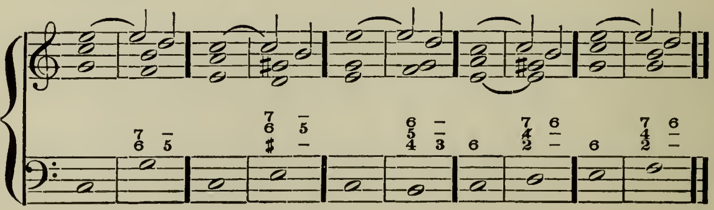
266.



But a fuller figuring may be employed; for the triad $\substack{8\\5\\4}\ \substack{-\\-\\3}$, and for the chord of the seventh $\substack{7\\5\\4}\ \substack{-\\-\\3}$.

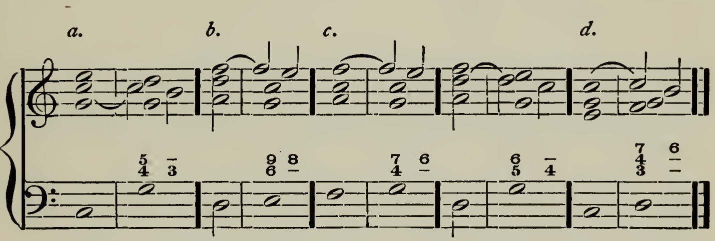
We indicate the suspension of the sixth before the fifth, in the fundamental position of the chord of the seventh, by $\substack{7\\6}\ \substack{-\\5}$, or in full $\substack{7\\6\\3}\ \substack{-\\5\\-}$; in the chord of the fifth and sixth by $\substack{6\\5\\4}\ \substack{-\\-\\3}$; and in the chord of the second by $\substack{7\\4\\2}\ \substack{6\\-\\-}$.

267.



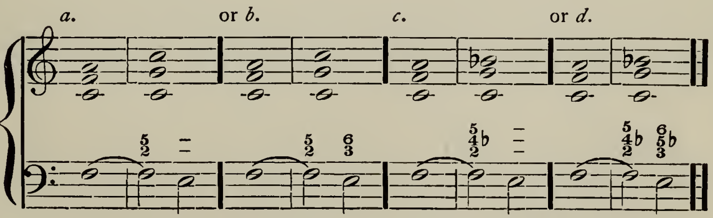
Thus in every case the suspension is indicated, as an accidental interval, by its figure as an interval above the bass; beside the figure for the suspension stands the figure indicating the resolution. Over or under the figure marking the suspension also stand the figures precisely indicating the chord; e.g. at *a* below, the figures $\begin{smallmatrix}5\\4\end{smallmatrix}\begin{smallmatrix}-\\3\end{smallmatrix}$ for the triad in its fundamental position; at *b*, $\begin{smallmatrix}9\\6\end{smallmatrix}\begin{smallmatrix}8\\-\end{smallmatrix}$ for the chord of the sixth; at *c*, $\begin{smallmatrix}7\\4\end{smallmatrix}\begin{smallmatrix}6\\-\end{smallmatrix}$ and $\begin{smallmatrix}6\\5\end{smallmatrix}\begin{smallmatrix}-\\4\end{smallmatrix}$ for the chord of the fourth and sixth; at *d*, $\begin{smallmatrix}7\\4\\3\end{smallmatrix}\begin{smallmatrix}6\\-\\-\end{smallmatrix}$ for the chord of the third, fourth, and sixth with suspended seventh, etc., as was also variously shown in the preceding examples.

268.



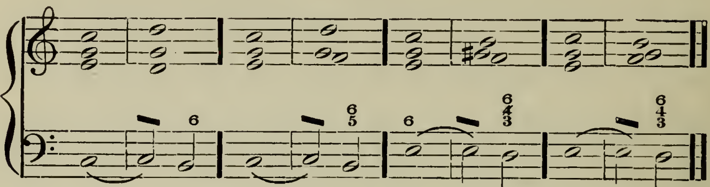
Where the suspension lies in the bass, the accidental intervals to which the suspended note gives rise are indicated in corresponding figures above the note of suspension; e.g. $\begin{smallmatrix}5\\2\end{smallmatrix}\begin{smallmatrix}-\\-\end{smallmatrix}$, $\begin{smallmatrix}5\\4\\2\end{smallmatrix}\begin{smallmatrix}-\\-\\-\end{smallmatrix}$. As the dashes call for the holding of the notes after the resolution of the suspension, it makes no difference whether we write $\begin{smallmatrix}5\\2\end{smallmatrix}\begin{smallmatrix}6\\3\end{smallmatrix}$ or $\begin{smallmatrix}5\\2\end{smallmatrix}\begin{smallmatrix}-\\-\end{smallmatrix}$, $\begin{smallmatrix}5\\4\\2\end{smallmatrix}\begin{smallmatrix}6\\5\\3\end{smallmatrix}$ or only $\begin{smallmatrix}5\\4\\2\end{smallmatrix}\begin{smallmatrix}-\\-\\-\end{smallmatrix}$.

269.



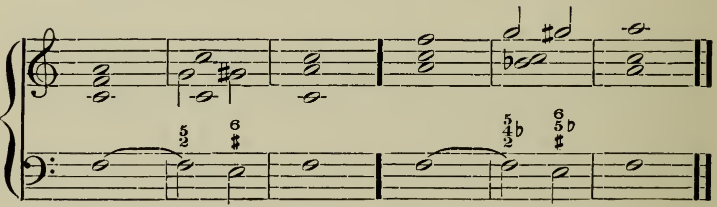
Formerly a suspension in the bass was indicated simply by a slanting stroke over the suspended note, the figure designating the real chord being set over the note of resolution in the bass.

270.

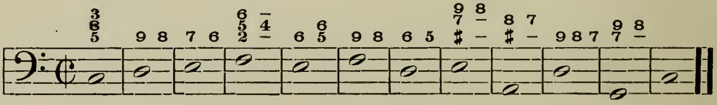


This mode of noting suspensions in the bass, which was at bottom much simpler and clearer, is now but little employed. In all the following examples suspensions in the bass are indicated by the figures required for the accidental intervals above the bass, and the continuation of these tones by means of dashes over the bass note of resolution, as already shown at 269 (*a*) and)*c*) ($\substack{5\\2}\,\substack{-\\-}$, $\substack{5\\4\\2}\,\substack{-\\-\\-}$). We shall employ the notation shown at 269 (*b*) and (*d*) only in case the chromatic alteration of an interval on resolution is desired; e. g. $\substack{5\\2}\,\substack{6\\\sharp}$ or $\substack{5\\4\\2}\,\substack{6\\5\\\sharp}$ etc.

271.

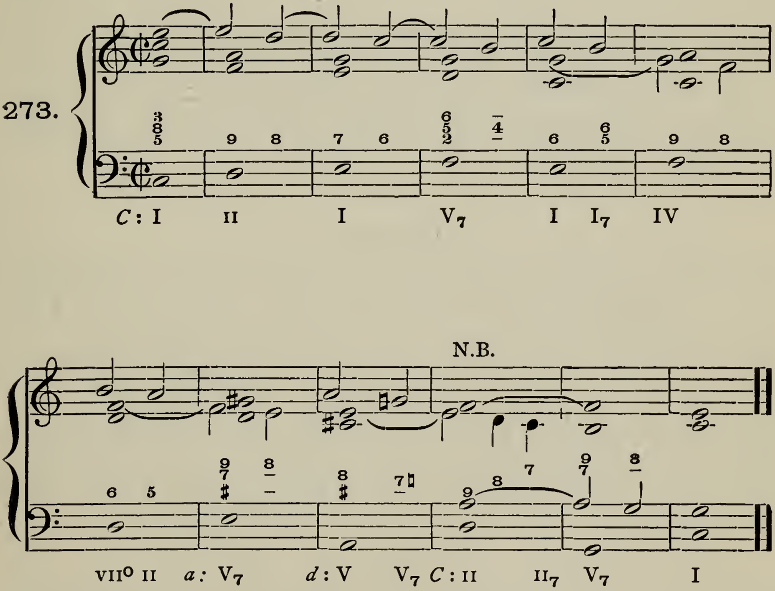


272.



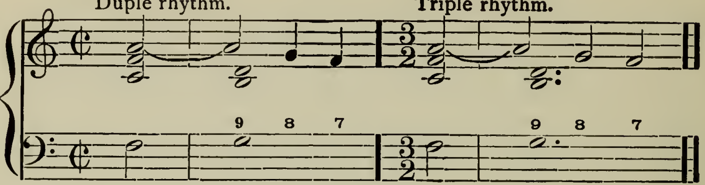
In order not to confuse the pupil we shall also occasionally mark the chord of the seventh in its fundamental position with $\substack{7\\5}\;\substack{7\\3}\;\substack{7\\5\\3}\;\substack{8\\7}\;\substack{8\\7\\3}\;\substack{8\\7\\\sharp}$, and the chord of the fifth and sixth with $\substack{6\\5\\3}$. The figure 7 before a 6 indicates, on the contrary, only the suspension of the seventh before the sixth in a chord of the sixth, as in measure 3 of Ex. 272. When working out these exercises, the pupil should write out the degree-numbers of the chords within the key in large and small Roman numerals, and the course of the modulation in large and small capitals beneath the bass, as we shall proceed to show in Ex. 273 (working-out of bass 272). A mere mechanical transformation of figures and chromatic signs into notes is simply writing out the thorough-bass notation in notes; this alone cannot promote a clear comprehension of the chords and their progressions. Throughout his work the pupil ought constantly to keep in view, in what key he is, and which chord of that key he has before him at any given moment. To further this end, the working-out of the bass at 272 now follows. The pupil should write out his exercises in precisely the same manner, *but in four clefs.*

273.



The preparation of the suspension must always be connected with the latter by a tie ⁀. The figuring 9 8 7 in *duple* rhythm always means, that the suspension fills out the whole first beat; for the resolution and the succeeding seventh the second beat is left, as shown in Ex. 273 at N. B. In *triple* rhythm the suspension, triad, and chord of the seventh divide the measure equally between them.

274.

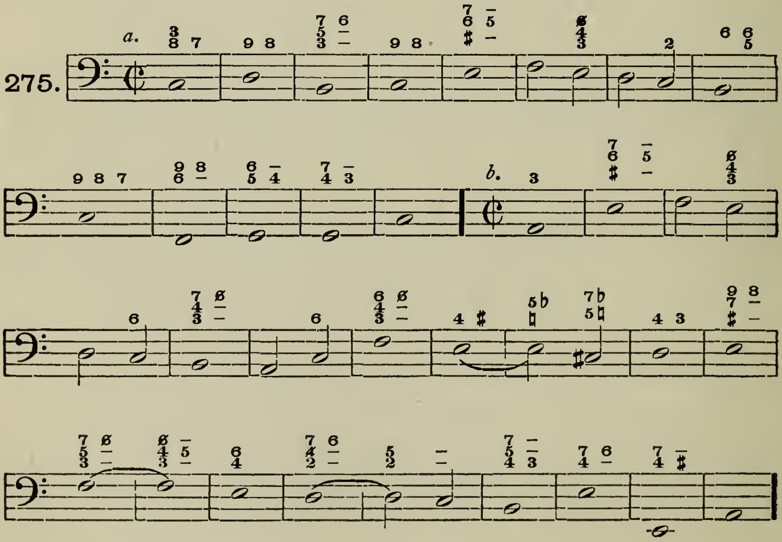


In this case the seventh following the octave must not be given to another part, still less should it be already present in another part.

In meas. 3 of Ex. 273 we have a suspension of the seventh before the chord of the seventh. The accidental chord arising from the suspension must be regarded as a *suspension*, and not as a *chord of the seventh* on the 3rd degree, because the bass is marked 7, and not $\substack{7\\5}$ or $\substack{7\\5\\3}$, the exhibition of a chord of the seventh with all its intervals not being desired here. (Comp. §52; also App. I, p. 264, and App. II, p. 282.)

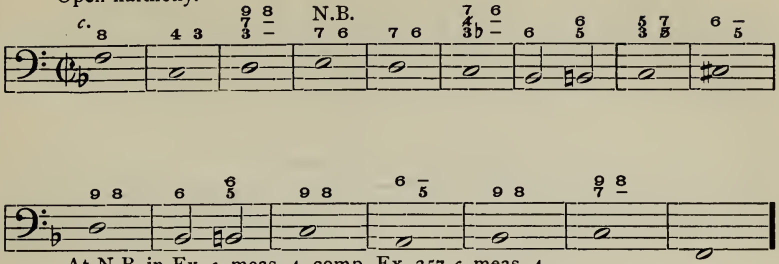
Exercises.

275.



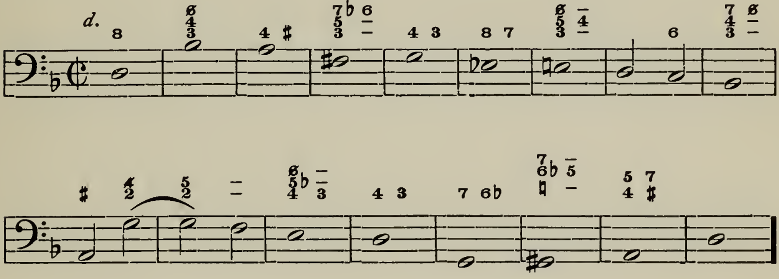
Open harmony.

c.

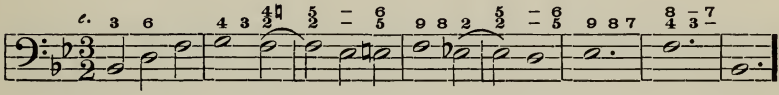


At N.B. in Ex. *c*, meas. 4, comp. Ex. 257 *c*, meas. 4.

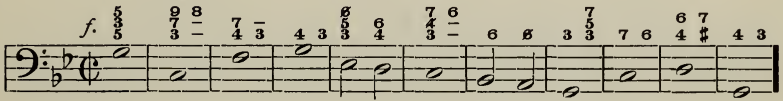
d.



e.

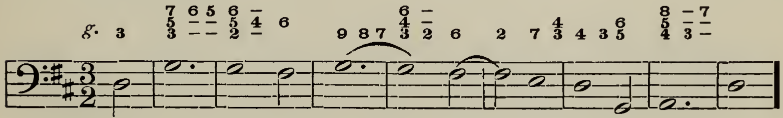


f.

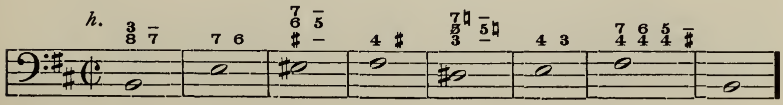


Open harmony.

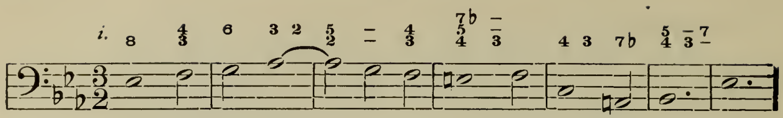
g.



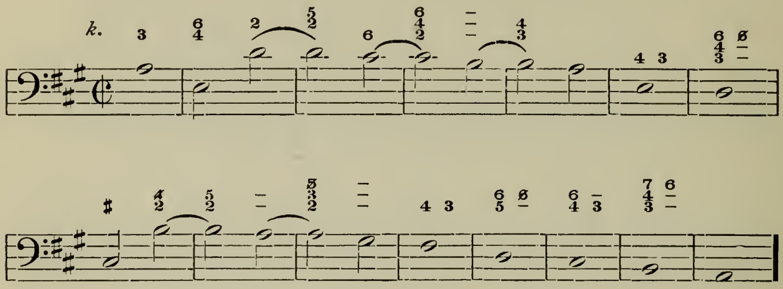
h.



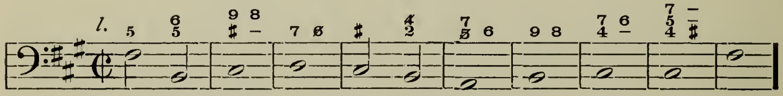
i.



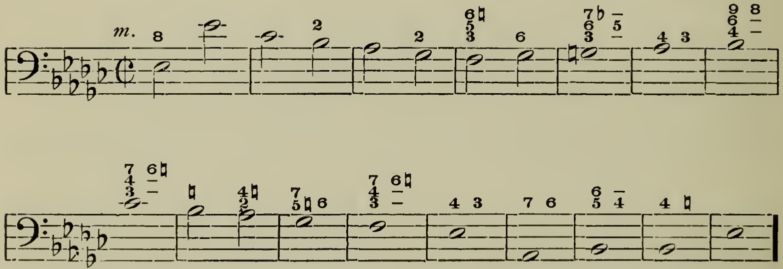
k.



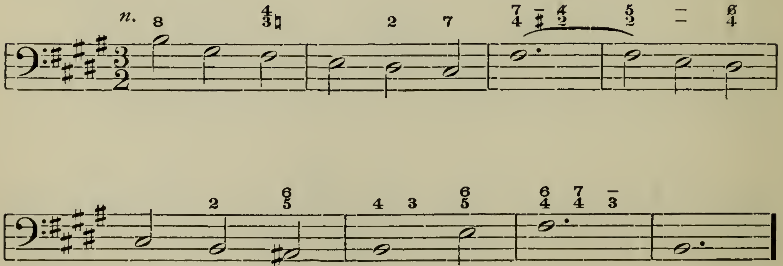
l.



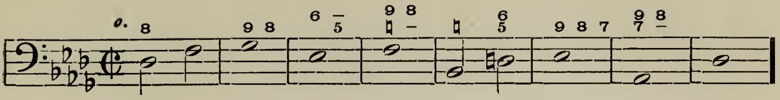
m.



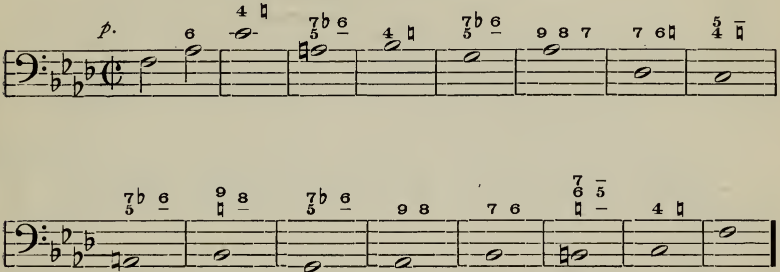
n.



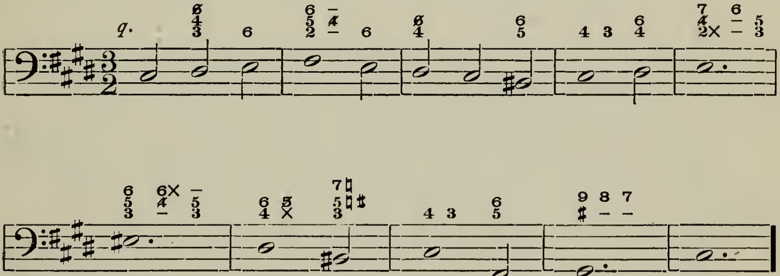
o.



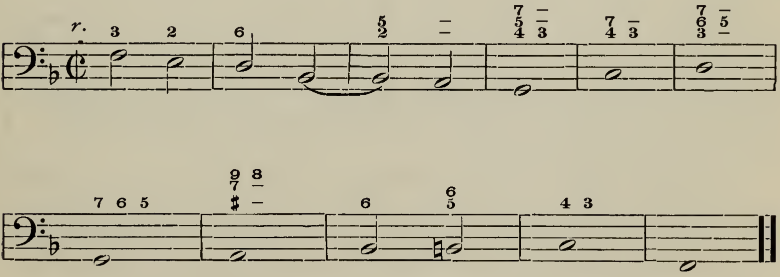
p.



q.



r.



The mark "open harmony" or "close harmony" at the head of these and subsequent exercises must not be taken as meaning that the entire exercise is to be worked out in open or close harmony, which alternate according to the leading of the parts.

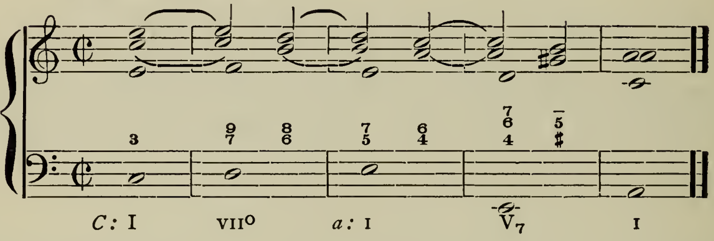
CHAPTER XVII.

Suspension in Several Parts.

§55. In four-part writing suspensions may occur simultaneously in two or even three parts; e. g.

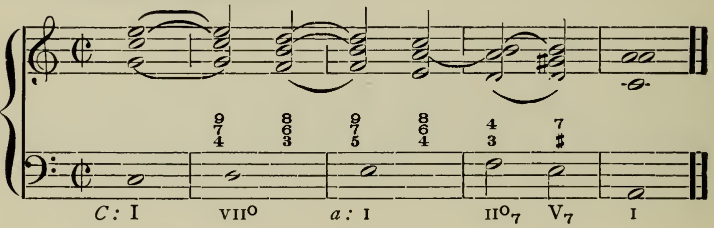
Suspension in two parts.

276.



Suspension in three parts.

277.

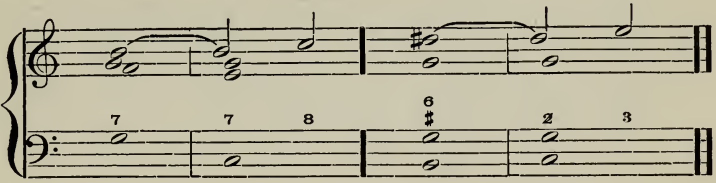


The accidental intervals then formed with the bass by the suspended tones are to be indicated by corresponding figures in such a way, that larger figures always stand over smaller ones, whatever may be the mutual position of the higher parts; thus $\substack{9\\7\\4}\ \substack{8\\6\\3}$, $\substack{9\\7\\5}\ \substack{8\\6\\4}$ etc., as in the examples above.

All suspensions hitherto shown were resolved downwards. This is the natural and correct progression, so that in freer leadings of the parts (as we shall see later) the *resolution* of the suspension will no longer be indicated, it being taken for granted that it progresses downwards. But there is one case in which the suspension will be resolved upwards; this may always occur when the suspended tone progresses a lesser *semitone* upwards to the tone of resolution.

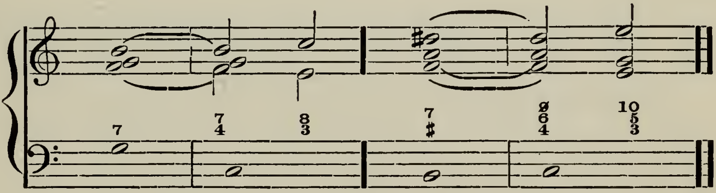
This resolution is explained by the *character of a leading-note* immanent to the upward progression of a lesser semitone. Indeed, such suspensions generally occur from the leading-note to the octave of the tonic, or from an altered tone to its natural tone of resolution above. They are seldom found *alone.*

278.



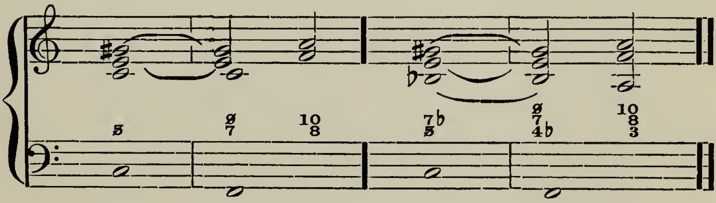
Suspensions resolving upwards are much oftener met with in combination with other suspensions resolving downwards.

279.



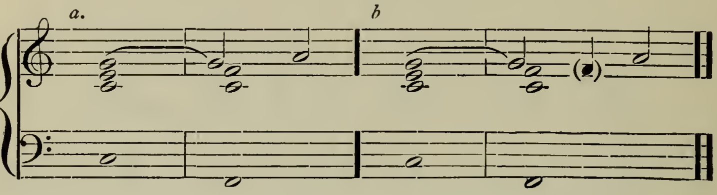
Two suspensions resolving upwards may occur either in combination with another suspension resolving downwards, or without the latter.

280.

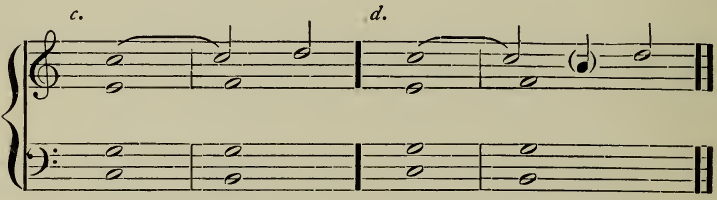


A suspension resolving by a *whole tone* upwards can never be employed by itself in strict writing. Suspensions of this kind sound stiff and unnatural. If one were to try to explain them by assuming that the proper tone of resolution leading downwards has been omitted, violations of the rules for resolving suspensions would become apparent, such as retarded parallel octaves, or the presence of the proper tone of resolution in an inner part.

281.



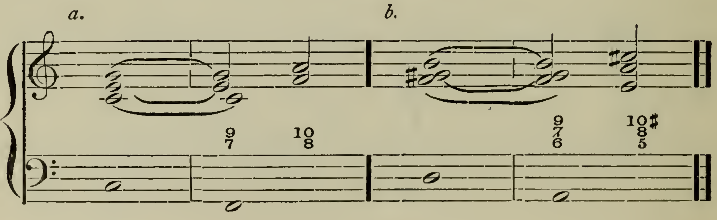
282.



The incorrectness in the progression of the suspension at 281 (*a*) is exhibited at 281 (*b*), where the true tone of the downward resolution is added in parentheses. But this tone is already present in the alto. The suspension at 282 (*c*) makes the incorrectness of its progression at (*d*) apparent. The interpolated true tone of resolution shows the open parallel octaves retarded by the suspension.

A suspension resolved by ascending a *whole tone* may, however, be employed in strict composition in conjunction with another suspension resolved by ascending a semitone; e. g.

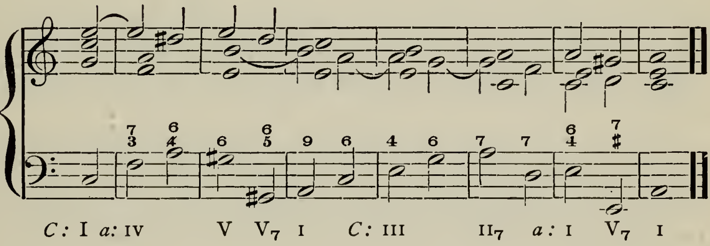
283.



Ex. 283 (*a*) shows such a double suspension resolving upwards. Ex. 283 (*b*) shows a double suspension resolving upwards combined with one resolving downwards. Both forms are correct.

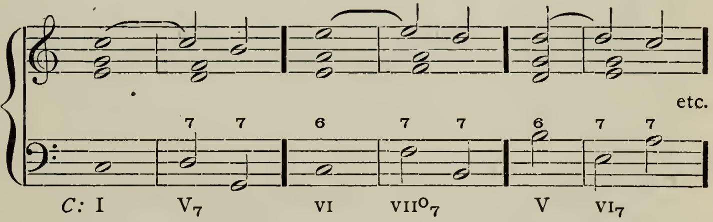
Till now we have always let the bass wait for the resolution of the suspension, the suspension and its resolution thus forming a *single chord.* The bass may, however, progress further simultaneously with the resolution of the suspension, either passing to another interval of the chord of resolution, or calling by its progression for a new and different chord. In either case *only the suspension itself*, and not its resolution, is indicated in thorough-bass notation. The resolution of the suspension is then assumed to be the regular descending one, and must be effected accordingly. Ex. 284 shows suspensions in which the bass progresses, simultaneously with the resolutions, to some other tone of the chord of resolution.

284.



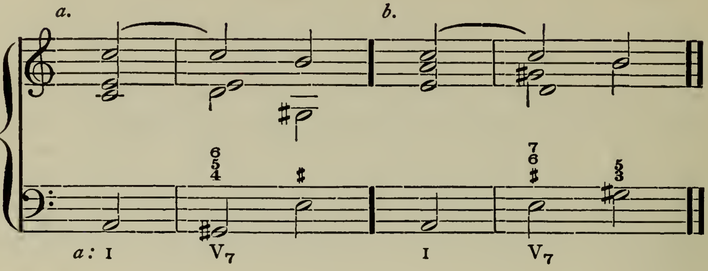
In meas. 6 of the above example we are enabled to mark the suspension and its resolution as *one* chord of the seventh with the root entering later; this we can do in all similar cases, e. g.

285.



Although in Ex. 284 and 285 the inner parts do not leave their positions, cases may occur in which a middle part must leave its position simultaneously with the resolution of the suspension, when the bass progresses to some other tone of the chord of resolution; e. g.

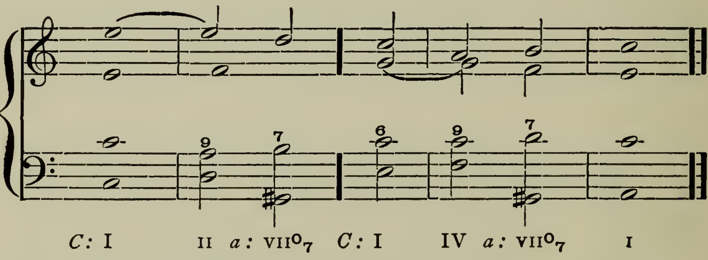
286.



In Ex. 286 (*a*) the chord of resolution would lack its third without the progression of the tenor; in 286 (*b*) the third of the chord (the leading-note) would be doubled were it not for the progression of the alto.

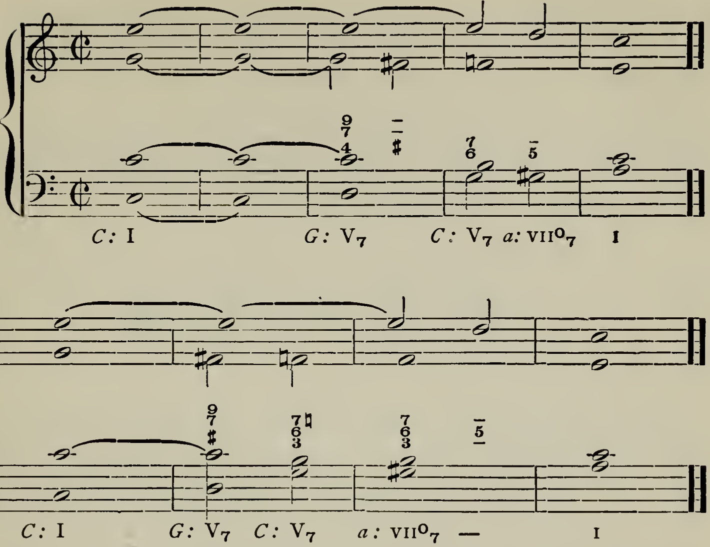
But when the bass, simultaneously with the resolution of the suspension, passes to a tone foreign to the true chord of resolution and calling for a new chord, it also forces one or both of the inner parts to progress at the same time to the tones of the new chord lying nearest them.

287.

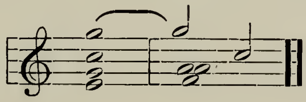


A suspension may also be held through several chords; it must then be indicated in each changing form of the chords by figures expressing its interval to the bass at the time; the new chord-forms arising during the suspension must also, of course, be precisely indicated by the thorough-bass figuring. Ex. 288 shows a suspension held through several chords.

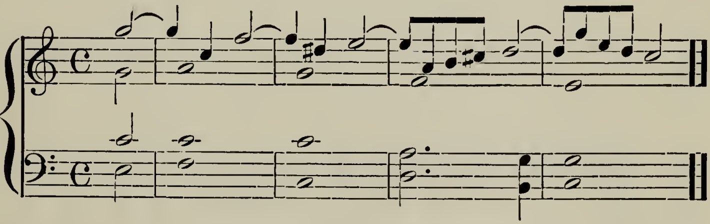
288.



REMARK. One or more tones may also be interpolated between the suspended tone and its resolution; such interpolated tones may belong to the chord of resolution, or be foreign to it, and may progress to the tone of resolution by a skip or a step; the proper tone of resolution may sometimes be entirely omitted, e. g.



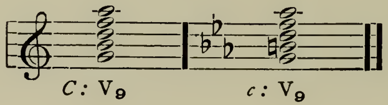
289.



In the following exercises the pupil will find little opportunity to write such interpolated notes before the tone of resolution; nor should he try to bring them in everywhere. In studying Counterpoint he will learn the value and importance which such interpolated notes sometimes possess for the motion and embellishment of a composition. For the sake of completeness we were obliged to mention them here.

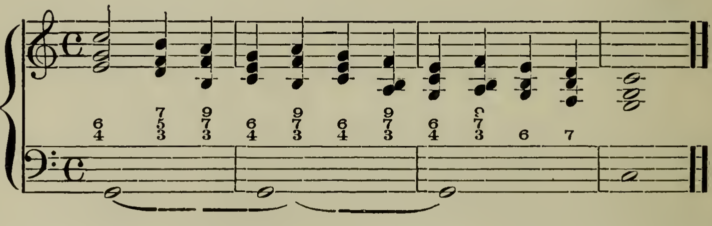
In the examples and exercises contained in Chapters XVI and XVII the figuring 9 8 or $\begin{smallmatrix}9&8\\7&-\end{smallmatrix}$, or even $\begin{smallmatrix}9&8\\7&-\\3&\end{smallmatrix}$, is often found over the bass note to indicate the suspension of the ninth before the octave in a triad, or before a chord of the seventh.

This is the exact figuring for the bass which earlier theorists used for the chord of the ninth. This chord was generally erected only on the dominant in major and minor.



Some text-books also speak of secondary chords of the ninth on other degrees of the scale. We regard such chords as accidental forms arising from the suspension of the ninth before the octave, and look upon it as superfluous to teach a form of chord rejected by some theoreticians, taught by others on only one degree of the scale, and employable usually only in its fundamental position, but not in its inversions. When using this chord in four-part writing, one interval, the fifth or seventh, must of course be dropped. As the ninth, being a dissonant interval, must always be prepared, every so-called chord of the ninth always appears as the suspension of a ninth before the octave of a triad (when the seventh is dropped), or of a chord of the seventh (when the fifth is lacking). But when a chord of the ninth enters without preparation of the ninth, it always proves to be a chord of the seventh on the 7th degree in major or minor (the sevenths of which may enter freely) over an organ-point; e. g.

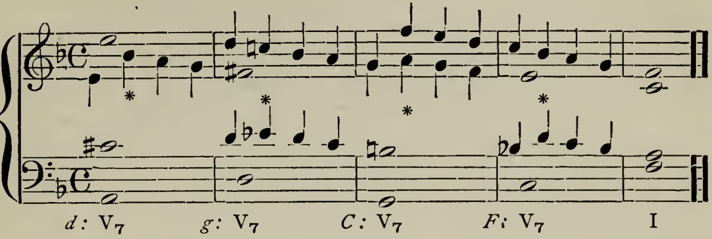
290.



This matter is treated of at length in Chapter XVIII, §58, "The Organ-point."

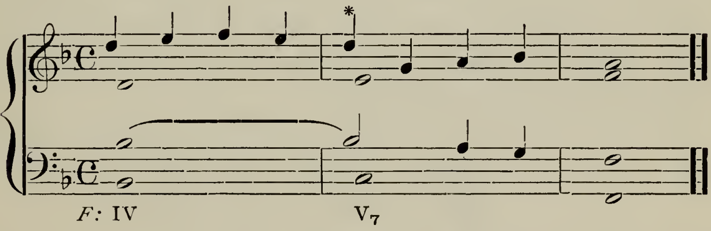
Of like character, and similarly explainable, is the free entrance of a ninth, by a skip or step, over a chord of the seventh or triad in figurate counterpoint, e. g.

291.



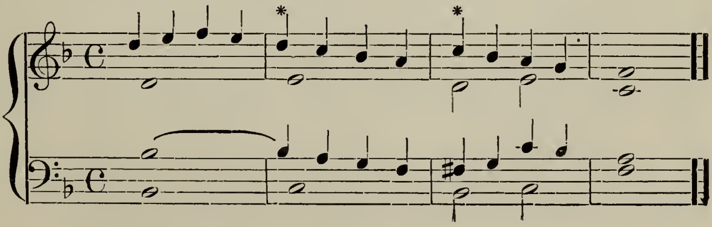
Such ninths are mostly found only on the weak beat; a few unprepared ninths occasionally appearing on strong beats do not justify the assumption that they are true chords of the ninth, and may easily be explained from the freer leadings allowable in figurate counterpoint. For instance, no one can well see, in Ex. 292, anything further than a changing-note *D* before the chord-note *C*, which *D* may enter freely and skip without touching *C* to the fifth of the chord of the seventh.

292.



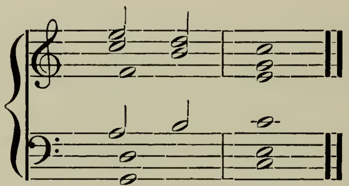
Such liberties in the leading will be fully explained to the pupil in his course in counterpoint. Besides, the true *strict* style of *pure* contrapuntal composition does not even permit such liberties in the leading of the parts as that shown in Ex. 292, for the changing-note should enter only by a step before the proper chord-note, as shown below:

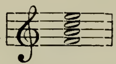
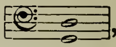
293.

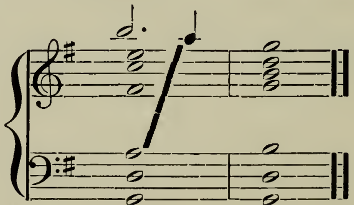


In this case, too, impartial judges can see only changing-notes preceding the chord-note, but not chords of the ninth, which must always be prepared. Here we need not discuss whether such leadings as those in Ex. 293 are really permissible in the strict style.

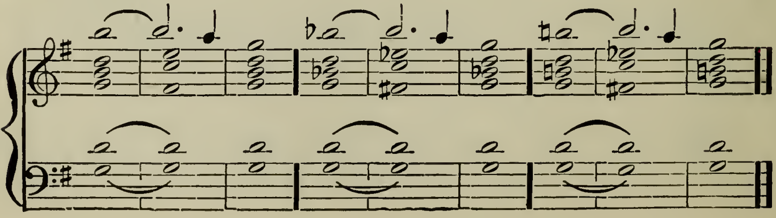
All the original chords enumerated by us, whether triads or chords of the seventh, could be erected on all degrees of the major and minor scales, and used both in their fundamental positions and — as a general thing — in all their inversions. Five-tone, Six-tone, or even Seven-tone chords (chords of the ninth, tenth, and eleventh), occasionally appearing as accidental chord-forms in the free modern style, e. g.



cannot be regarded as original chords, whether prepared or not. Even the above accidental chord, which we conceive as a chord of the seventh  formed above the double organ-point , can hardly be sufficiently prepared; still less a chord consisting of seven intervals like the following:



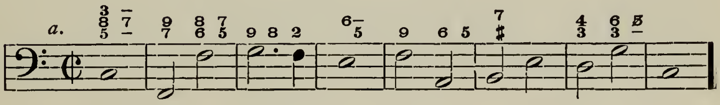
Such a combination of intervals is not proper for employment in strict writing, if only for the reason that the tone of resolution of the suspended tone is found in an inner part. But even in the following form



we cannot call these accidental formations chords of the thirteenth with omitted ninth; we must rather consider them as chords of the seventh on the 7th degree over the double organ-point of the tonic and dominant, with the prepared suspensions *B* or *B*♭ before *A*, this *A* being the fourth before the third of the said chords of the seventh, the seventh of which (*E* or *E*♭) can enter unprepared. (Comp. App. I, p. 267, and App. II, p. 282.)

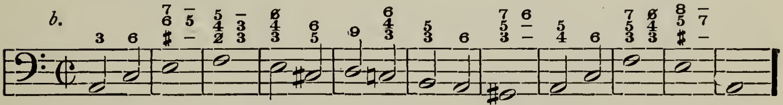
Exercises.

294. *a.*

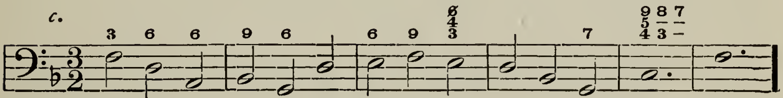


Open harmony.

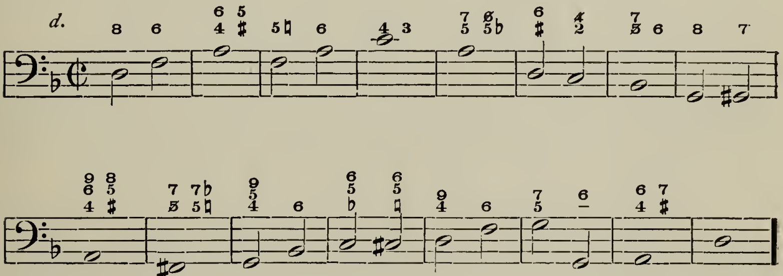
b.



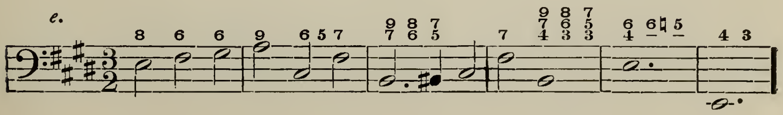
c.



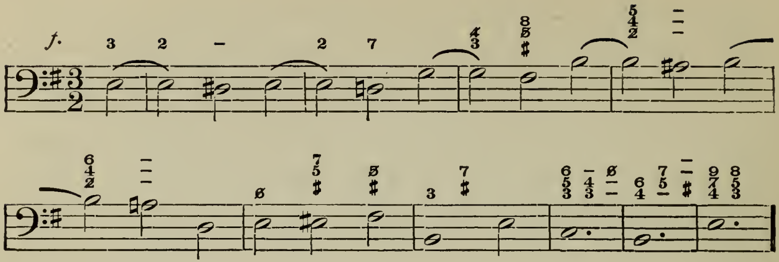
d.



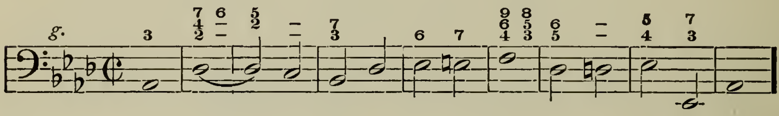
e.



f.

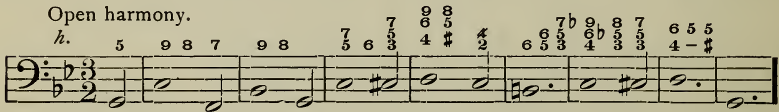


g.

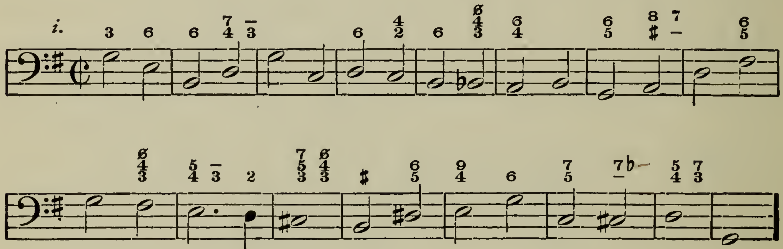


Open harmony.

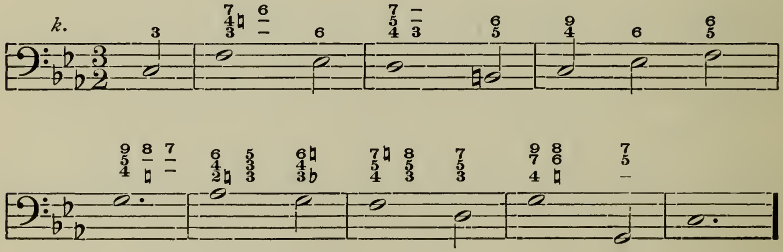
h.



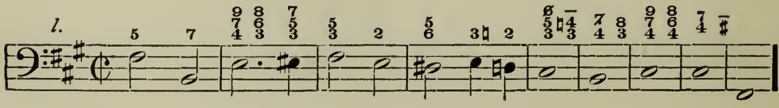
i.

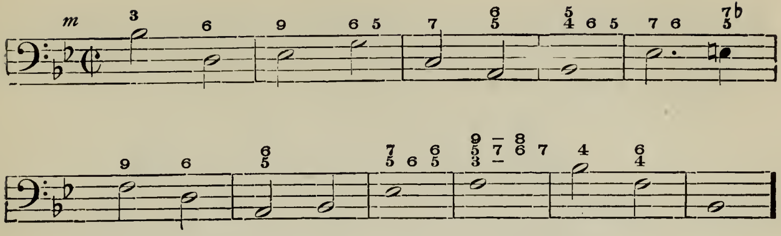


k.



l.



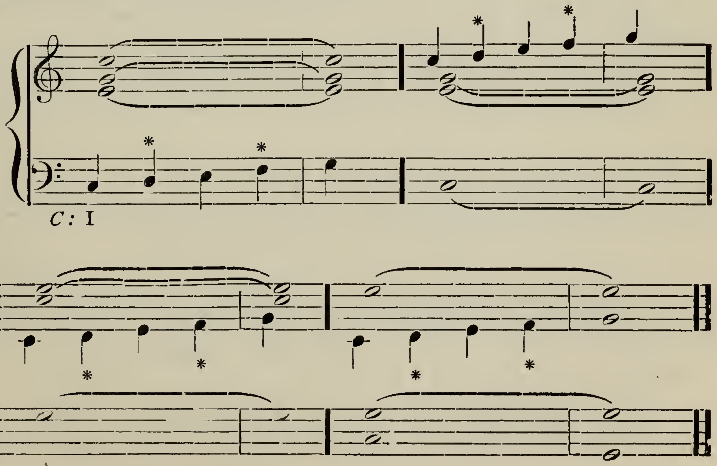


CHAPTER XVIII.

Passing-notes and Passing-chords; Changing-notes; the Organ-point.

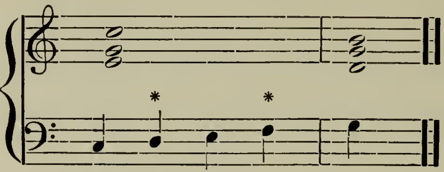
§57. We apply the name of passing-notes or passing-tones to tones interpolated and progressing *by a step* between two tones belonging to one or two chords, which passing-notes may either belong to the first of these chords, or may transiently form, in combination with it, a nearly-related accidental chord-form new and rich in effect. But they may also be foreign to the said first chord, and form a dissonance with it. Such a dissonant passing-note must progress *stepwise* to a tone belonging to the first chord or, if a second new chord enters, to one of its tones. *The passing-note can never enter on the strong beat.*

295.



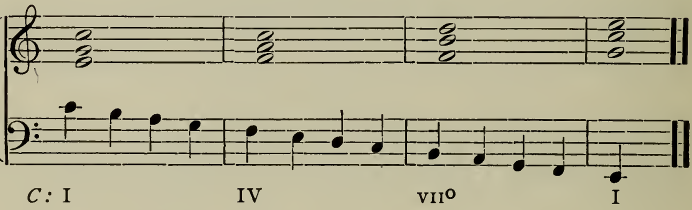
In Ex. 295 the notes *D* and *F* marked with asterisks are passing-notes, which are foreign to the chord, and are interpolated between the tones *C – E – G* of the *C*-major triad.

296.



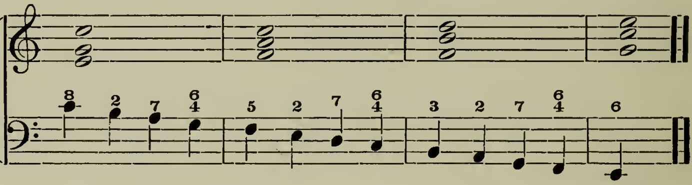
Ex. 296 shows us the same passing-notes between two chords.

297.



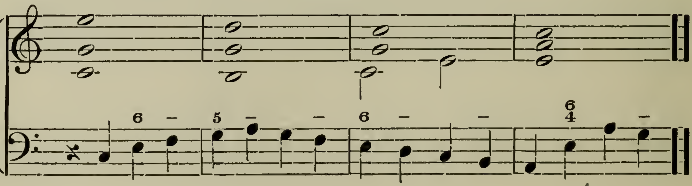
Ex. 297 shows us passing-notes between the chords on the 1st, 4th, 7th, and 1st degrees in *C*-major; they either form new accidental chords with the above chords, or belong to the true original chords. We might figure Ex. 297 as follows:

298.



This is, however, unnecessary; in future we shall mark passing-notes in the bass only by a dash over the note, whether they form or do not form an accidental chord with the bass note.

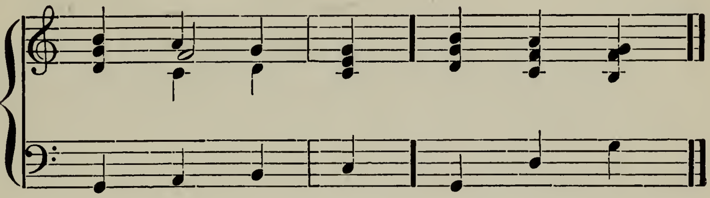
299.



The dash over the note shows that *no* true new chord is formed over the note, but that the preceding chord is to sound on in the other parts with the passing-note.

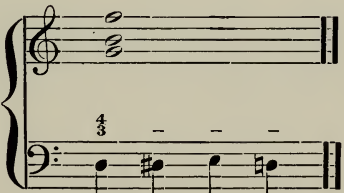
Passing-notes in two or more parts may form passing chords.

300.



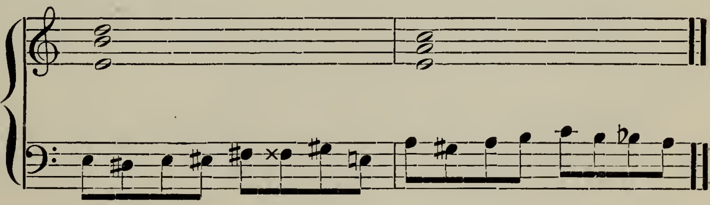
Passing-notes may also be led chromatically.

301.



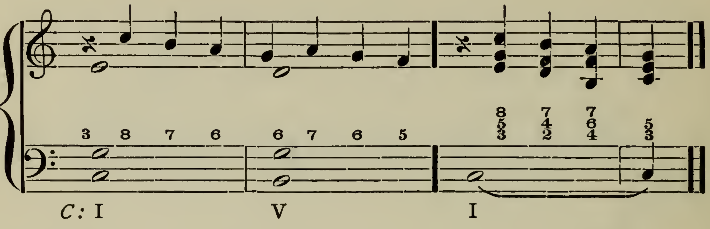
Chromatic passing-notes must not, however, be employed too frequently. Progressions like the following in Ex. 302 are *not* adapted for strict composition.

302.

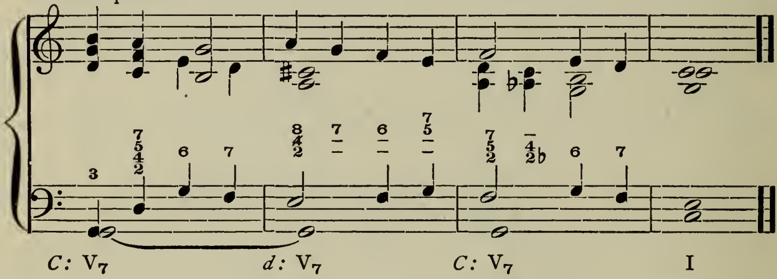


Passing-notes and chords in the *higher* parts must be indicated by the corresponding figures and signs of thorough-bass notation over the bass-note. (Compare §58 on "The Organ-point").

303.

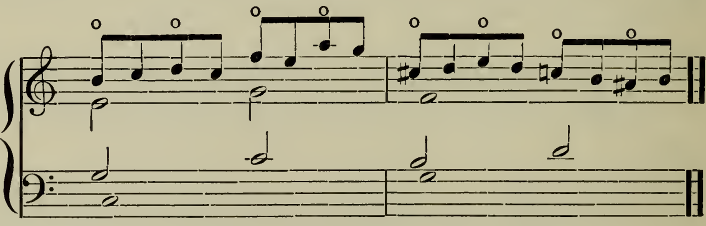


Five parts.



Changing-notes are notes foreign to the chord, falling on the strong beat and reaching the chord-note by the step of a tone or semitone, which bear the character of an unprepared suspension. They may enter from above or below, either by a step or skip before the chord-note, and without preparation. (Comp. Ex. 293, meas. 2 and 3).

304.



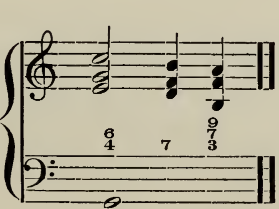
In Ex. 304 the changing-notes are marked o.

Passing and changing-notes can be employed only in figurate counterpoint and on the weaker beats, for the animation of the rhythm. The former occur in practice far oftener than the latter. In our opinion the occasional employment of changing-notes is not prejudicial to purity of style, but their over-frequent use is not to be recommended in the strict style. In his course in counterpoint the pupil will receive detailed instructions on this point.

On the Organ-point.

§58. An organ-point arises when the bass, being held throughout a metrically and rhythmically well-defined portion of a piece, forms the basis for a series of chords which, after the first consonant one, are in part consonant to the bass, and in part changing chords sometimes even having no direct relation to the bass tone. An organ-point may be set at the beginning of a composition on the tonic, in its midst or towards the end on either tonic or dominant, or even on both tonic and dominant at once. Both the first and closing chord of an organ-point should be a consonant, independent chord ; though an organ-point on the dominant may begin with the dominant chord of the seventh. Over the organ-point, chords consonant and dissonant to the bass tone should alternate. An excess of dissonant chords, often out of all accord with the bass, has a bad effect. It is also best to form the close of the organ-point on a rhythmically and metrically well-defined part of the composition. An arbitrary breaking-off of the organ-point is not to be approved of. The lowest part among those over the organ-point, i. e. in four-part writing the tenor, forms as it were an independent bass to the other parts above it. Thus when the chord of the seventh on the 7th degree appears over an organ-point on the dominant, we get the accidental chord-form called by some theoreticians the chord of the ninth (comp. §56).

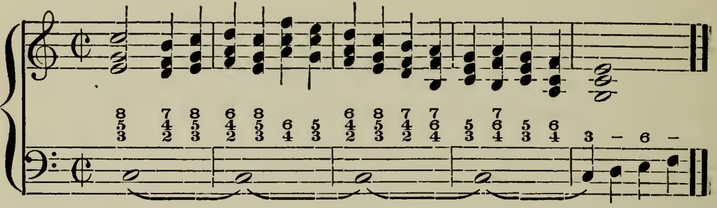
305.



Below are a few examples, from which the pupil will perceive that the thorough-bass figuring of the true original chords and of the passing chord-forms over the bass tone of the organ-point is a purely mechanical one. The figures exactly indicate the intervals as reckoned from the bass.

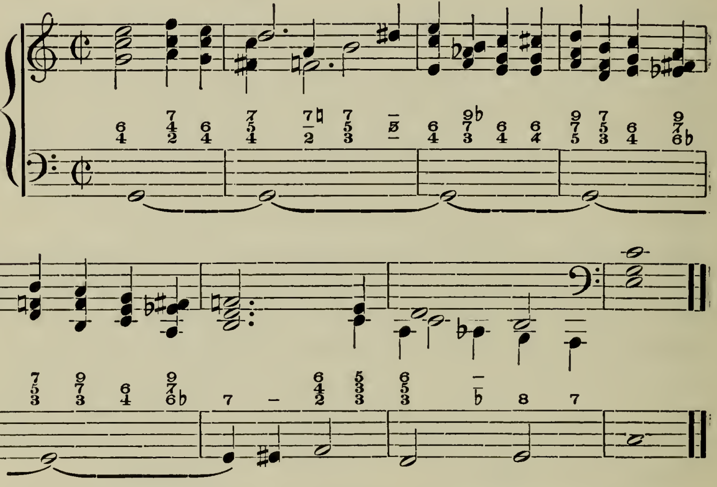
ORGAN-POINT ON THE TONIC.

306.



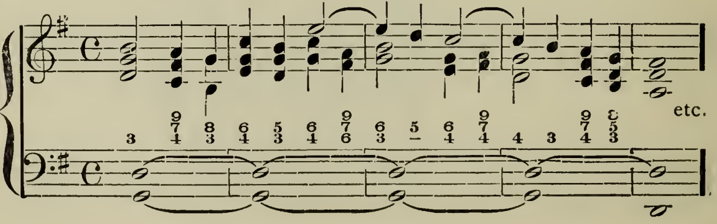
ORGAN-POINT ON THE DOMINANT.

307.



Organ-point on tonic and dominant; the thorough-bass figuring is reckoned from the tonic (key-note).

308.

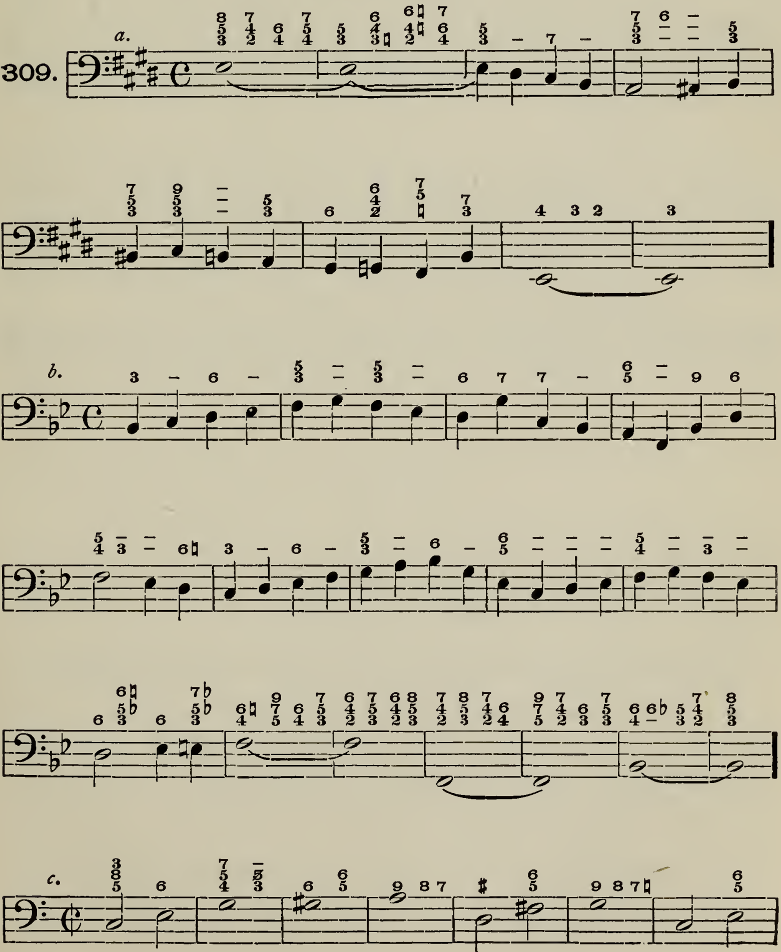


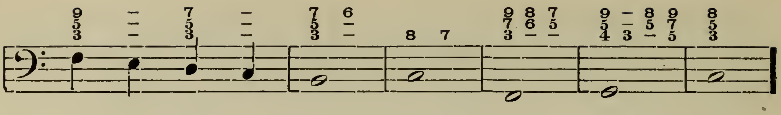
An organ-point occurring in any of the higher parts is termed an *inverted* organ-point. Other terms used for the organ-point are *pedal-point*, *pedal harmony*, or simply *pedal*.

Organ-points in the higher parts, however, can be employed far less frequently than in the bass, and are less suited to the strict than to the free style. (Comp. also App. I, p. 269, and App. II, p. 283.)

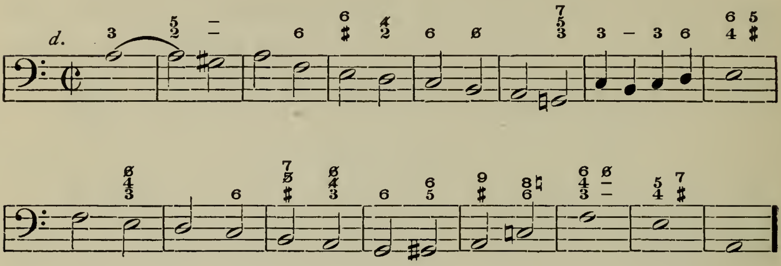
Exercises.

309.

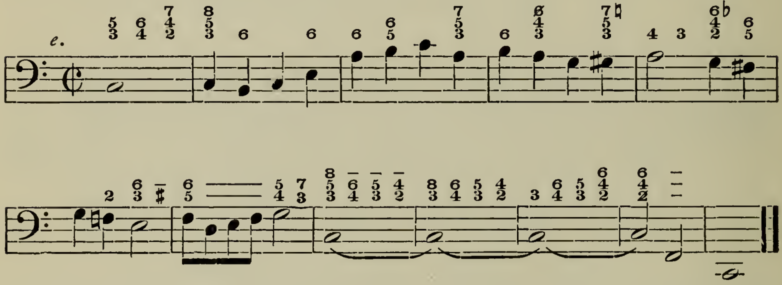




d.



e.



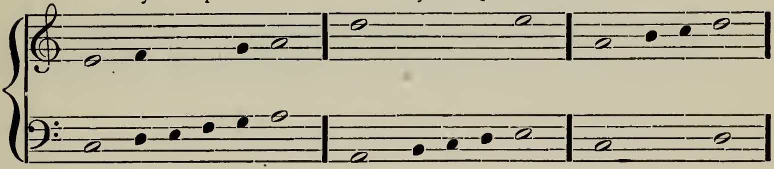
CHAPTER XIX.

Covered Parallel Octaves and Fifths. Cross Relation.

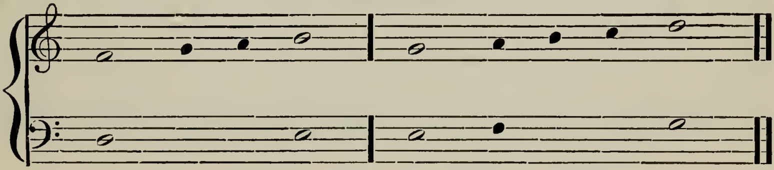
§59. In previous chapters we have already touched upon the essential points concerning forbidden octaves and fifths; we return to the subject in order to remark, that our former observations on covered octaves and fifths were made primarily with reference to four-part writing. The case is different where more than four parts are present, a larger number of parts often so concealing the above-mentioned progressions, that their unpleasing effect in four-part composition is quite obviated. In two-part or three-part writing increased caution is necessary, any covered incorrect progression being much more noticeable in the same.

Covered octaves and fifths can arise, as the pupil already knows, only in *parallel* motion, when two parts progress from any two different intervals to an octave or double octave, fifth or twelfth.

Covered octaves by a skip. Covered octaves, one part progressing by a skip, the other, by a step.



Covered fifths.



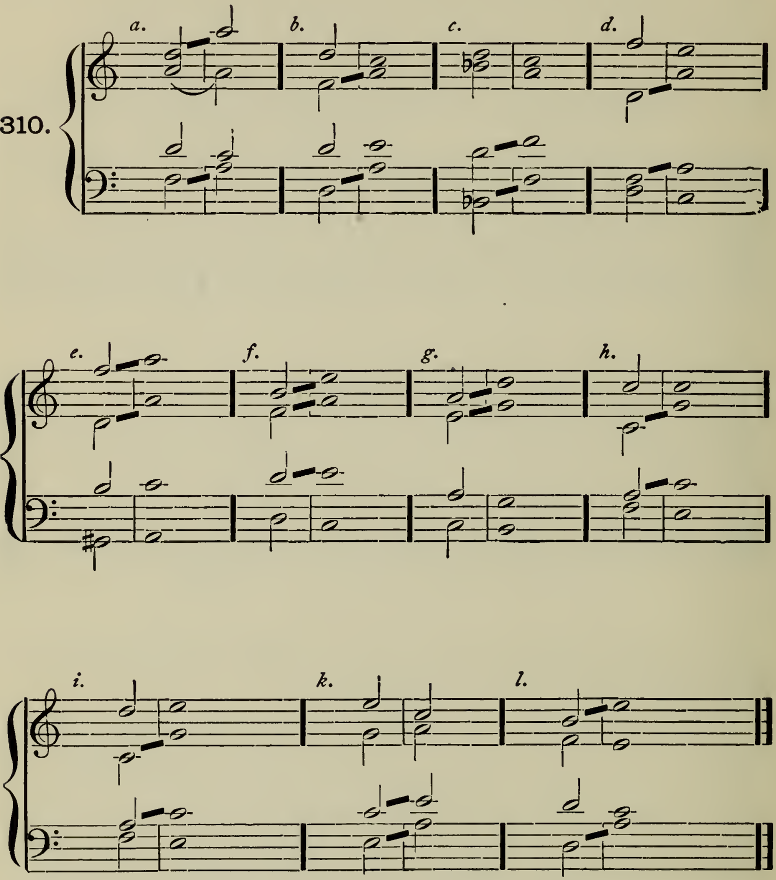
The parallel fifths and octaves come to light when we fill out the skips made by the parts with small notes.

In four-part writing, on the other hand, an easy and natural progression of the parts is impracticable without covered fifths and octaves. It must be our first care, to show the pupil what forms of covered fifths and octaves produce a bad effect in four-part writing.

To this end we shall now briefly review the forms of covered fifths and octaves to be avoided by the pupil in four-part composition. But we advise him at the same time not to be over-anxious to avoid other forms of covered octaves and fifths besides those prohibited here. For by trying to avoid imaginary errors, he might easily go to the opposite extreme of a stiff and unnatural leading of the parts. On the other hand, we desire him carefully to avoid, in every case where it is possible to do so, the progressions of fifths and octaves censured here, not only at present, but also in the most difficult contrapuntal forms, such as the canon, fugue, and stretto of the fugue.

Covered octaves and fifths are to be avoided, when the two parts skip to the octave or fifth (twelfth) *from one chord to another chord.*

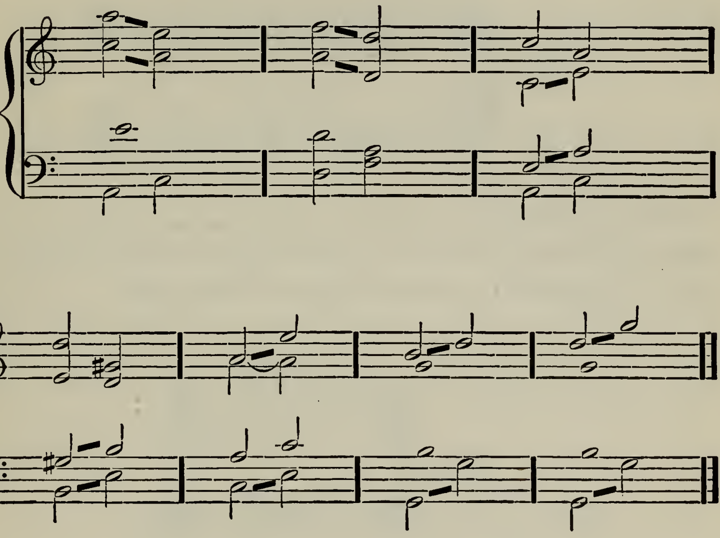
310.



Although some of these parallel octaves and fifths here entering by a skip are introduced under the most favorable circumstances imaginable—as at *b*, *c*, *d*, *f*, *h*, *i*, and *k*, where everything is done, by the aid of contrary and (at *h*) oblique motion in the other parts, to soften the unpleasing effect of the incorrect progressions—each and every one of them is to be condemned.

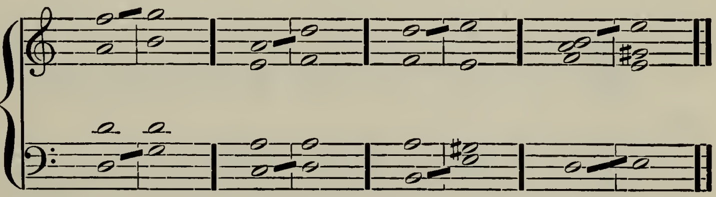
But when merely a transposition of *one and the same chord* is effected, parallel octaves and fifths so entering by a skip are permitted; e. g.

311.



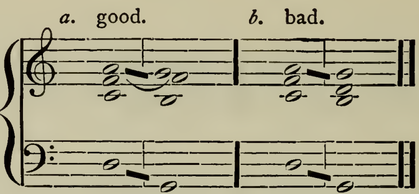
Covered octaves are likewise forbidden between outer parts, when one part progresses upwards by a whole tone and the other takes the octave by a skip (comp. §21)

312.



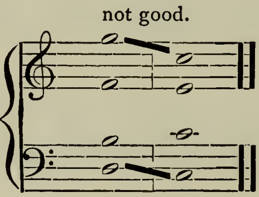
When the *higher* of the two parts progresses downwards by a whole tone to the *root* of the chord to which the other outer part skips, the covered octaves are permitted, providing that the leading of the parts in general is not incorrect. Consequently, Ex. 313 (*a*) is good, and (*b*) not good, because all four parts progress downwards.

313.



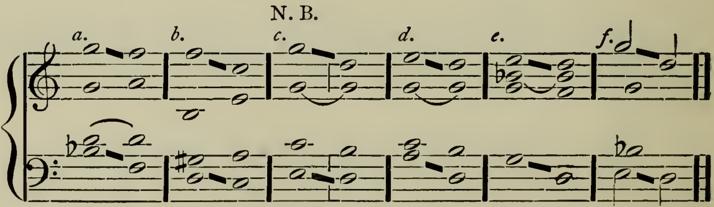
But, when the *lower* of the two outer parts progresses downwards by a whole tone to the *root* of that chord, to which the higher part skips, the parallel octaves resulting are faulty; e. g.

314.



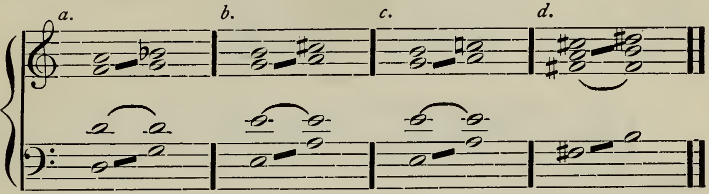
When one of the outer parts progresses downwards by a step to the third or fifth of the chord, and the other outer part takes the same interval by a skip, the effect is extremely unpleasant; such covered octaves are strictly forbidden.

315.



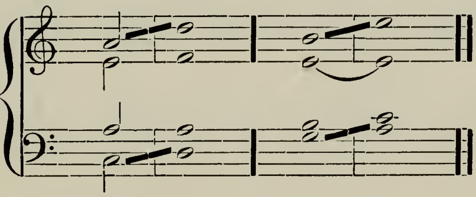
All the above covered parallel octaves given under Ex. 317 are bad, and must be carefully avoided; excepting that marked N. B., which may be permitted, because its effect is rendered less unpleasing by the close relationship of the two chords.

Covered octaves between one outer and one inner part are less noticeable, when the *higher* part ascends stepwise by a whole tone to the *root* of that chord to which the *lower* part skips.

316.


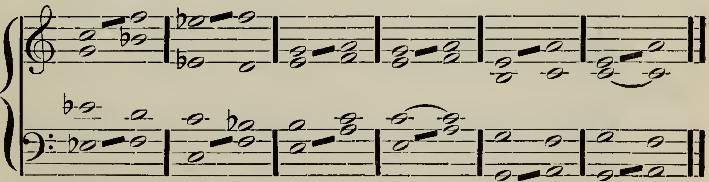
However, progressions of this kind have a better effect when the bass progresses in contrary motion, than with the covered octaves, especially in the cases at *b* and *d*; still, even these are not to be condemned where higher considerations, such as strict imitation, are involved.

But when the *higher* part skips to the *root* of that chord, to which the lower part progresses by a *whole tone*, the effect is unpleasanter. Progressions of this kind

317.


must be carefully avoided.

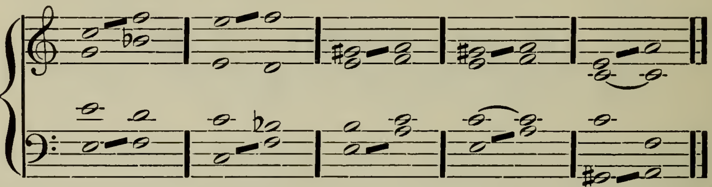
When one of the outer parts skips, not to the *root*, but to some *other interval* of the chord to which the other part progresses by the step of a *whole tone*, the covered octaves arising have an exceedingly disagreeable effect, and must be avoided in all cases. Progressions like these

318.


must invariably be avoided.

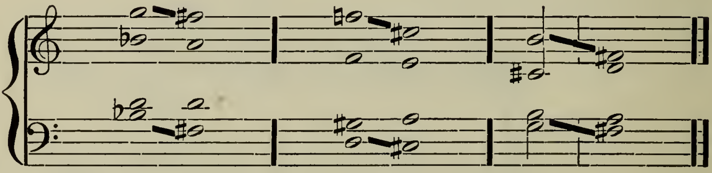
The unpleasant effect of all these covered octaves is immediately neutralized, when the part ascending or descending by a step progresses by a *semitone* to the *root* of that chord, to which the other part skips. In the case of other intervals, however, the effect remains bad, and progressions of this kind

319.



are not allowable, despite the step of a semitone in one part. Even if one part *descends* to the third of the chord by a semitone, progressions like the following

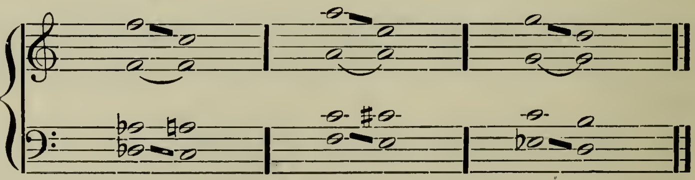
320.



are very harsh and unpleasing, if only by reason of the doubling of the leading-note formed thereby.

On the other hand, covered octaves in which the lower part descends a semitone to the *fifth* of the chord, while the other part skips to the same interval, may be written. Progressions of this kind

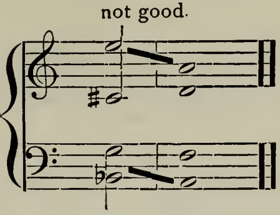
321 a.



may be permitted unreservedly.

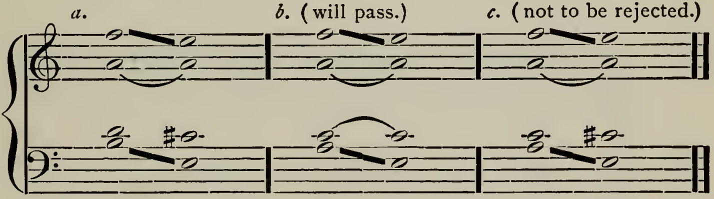
Progressions like those just described may sometimes, however, have a disagreeable effect, as Ex. 321 *b* shows.

321 b.


not good.

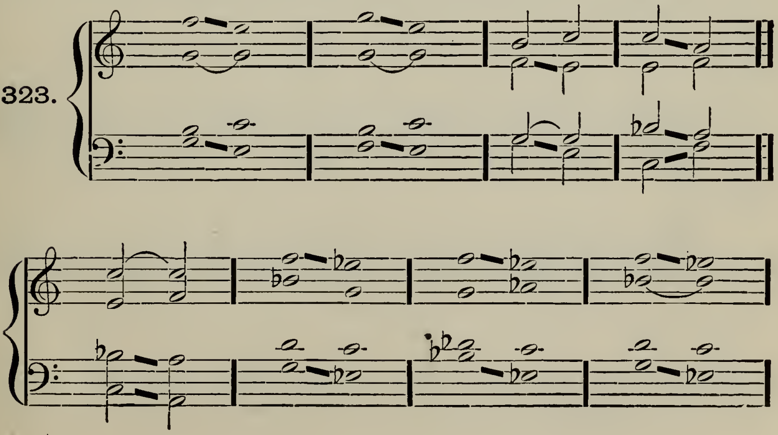
It is different, again, when the *higher* part steps by a semitone to the *fifth* of the chord, and the *lower* skips to the same interval. A good effect can then be seldom obtained. Of the progressions at 322, only the third, under *c*, can be tolerated; those under *a* and *b* are to be condemned.

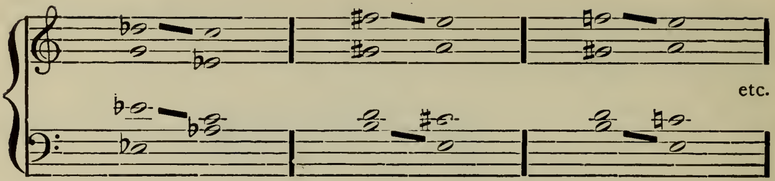
322.


a. *b.* (will pass.) *c.* (not to be rejected.)

Further, all parallel octaves arising from the resolution of a seventh, whether the latter descends by a *whole tone* or a *semitone*, are to be *carefully avoided in all parts as entirely incorrect* (comp. §45). All progressions given at No. 323 are bad.

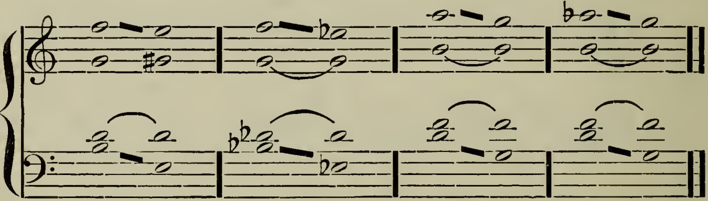
323.





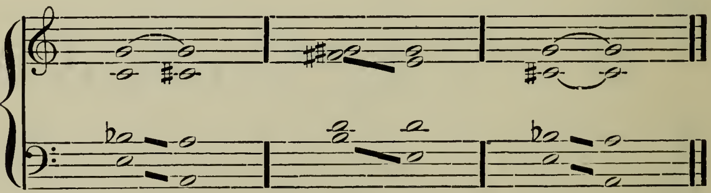
As quite isolated exceptions to this rule forbidding covered parallel octaves from the seventh, we can mention only a few peculiar progressions between two chords of the seventh. In *some* such cases, the covered octaves arising may be permitted when the resolution is effected to the fundamental position of the chord of the seventh, because the progression does not sound badly. The progressions at No. 324, for instance, are *not* censurable.

324.



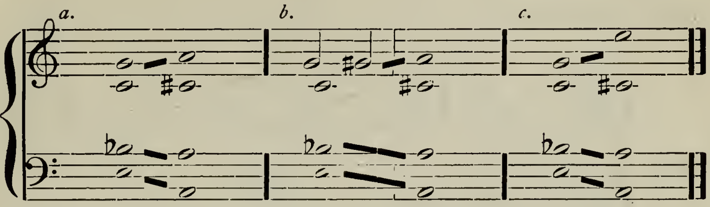
Even when the covered octaves are between an inner and an outer part, the progression between two chords of the seventh may have a good effect at times, and may then be permitted; e. g.

325.



Under certain conditions even a resolution to a triad may occur, in case the unpleasant effect of the covered octave is neutralized by vigorous contrary motion; thus the progression at 326 (*a*) is tolerable; that at *b* may be written unhesitatingly; that at *c* is bolder.

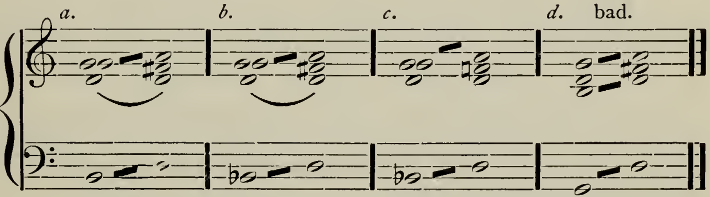
326.



All that we have said concerning covered octaves holds good, of course, for covered unisons, which prove a still faultier leading of the parts than parallel octaves.

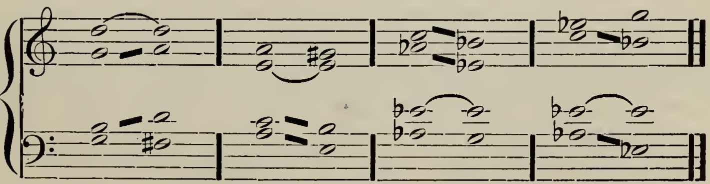
§60. In §59 we remarked that covered parallel fifths are to be avoided between all parts when both parts skip. When the higher part takes the fifth by a step, while the lower skips to the same interval, the covered fifths arising are permitted between *all* parts, provided that the leading of the parts is otherwise correct.

327.



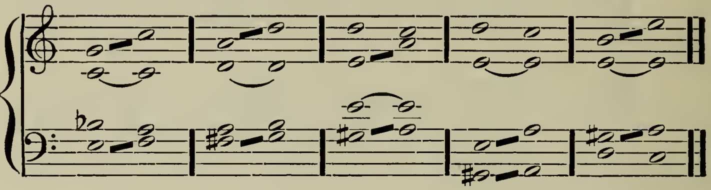
The progressions at 327 (*a*), (*b*), and (*c*) are good; that at *d* is altogether incorrect and unallowable, both on account of the parallel octaves taken by a skip in tenor and bass, and of the simultaneous upward progression of all the parts. The progressions at 328 are quite correct.

328.



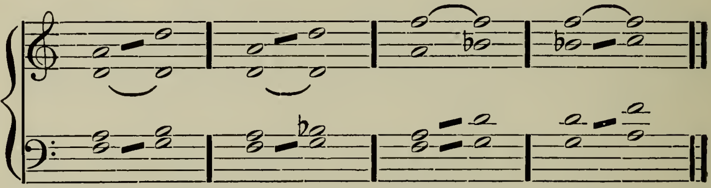
But if the *higher* part skips to the fifth, while the *lower* progresses to that interval by a step, the progression can be sanctioned only when the lower part takes the step of a *semitone*. The following cases are correct:

329.



The progressions at No. 330 are not allowable, because the lower part takes the step of a whole tone.

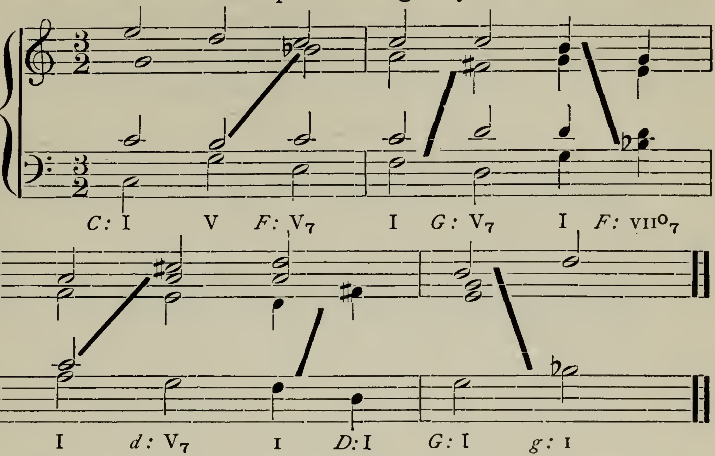
330.



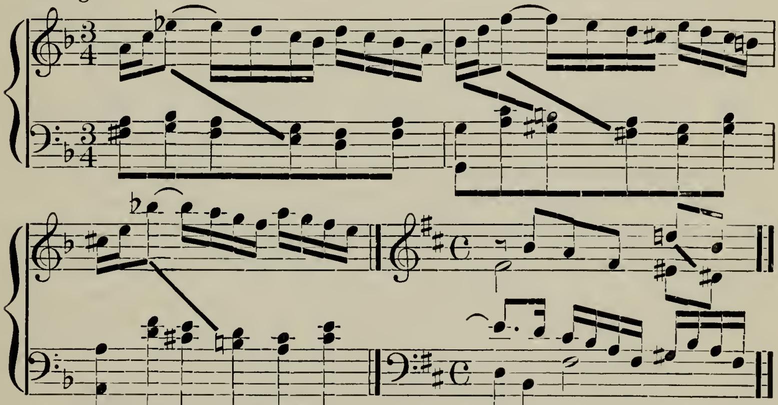
The above rules for, and prohibitions of, certain covered parallel octaves and fifths, are intended to indicate to the pupil what may or may not be written. It would scarcely be possible to lay down definite rules covering all cases in which covered octaves and fifths may occur in four-part writing. Generally speaking, the leading of the parts will form the prime consideration; in the cases in which we prohibited these progressions as incorrect, they gave rise, in fact, to a bad leading of the parts, and may be avoided by a better leading. One might therefore simply lay down the rule, that covered octaves and fifths are not permitted when a stiff and awkward leading of the parts arises from this progression; but in other cases they may be written with the less hesitation, that through studied avoidance of any and all covered octaves and fifths in four-part writing one might easily fall into the mistake of giving up a natural and thoroughly correct leading, and selecting a worse one instead. Mature experience, artistic insight, and good taste will show the advanced pupil later what is to be done in each individual case.

The Cross Relation (also called the *false* or *inharmonic* relation) can occur in strict four-part writing only at a modulation.*

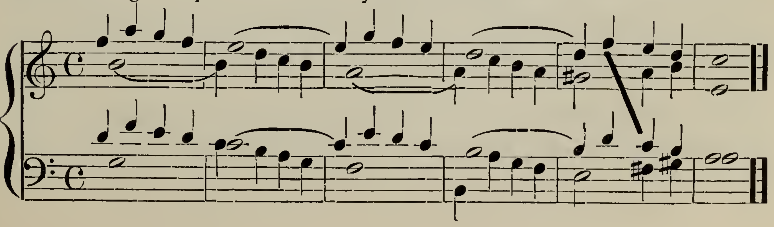
331.



*This rule holds good only for simple four-part writing in equal counterpoint, i. e. counterpoint in which only notes of equal duration are set to a cantus firmus. In figurate counterpoint the best masters write with the greatest freedom; Bach writes, without paying the least attention to the cross relation, passages like the following:

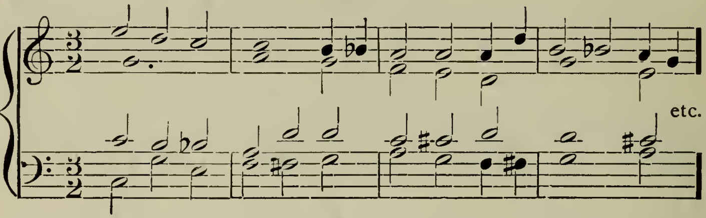


The cross relation will be treated of at length during the course in counterpoint; in the following example it can evidently not be avoided.



The free entrance of the chromatically changed tone in a part other than that in which the natural tone was contained in the preceding chord, has a very ill effect. The chromatic change should rather be effected within one and the same measure *in the same part.* The errors in Ex. 331 may be avoided in the following way:

332.



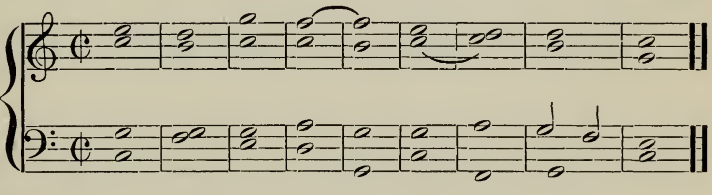
CHAPTER XX.

Employment of Chords in Accompanying a Cantus Firmus in Four-part Writing.

§61. Hitherto the pupil has erected chords and effected progressions only over a given bass part marked with thorough-bass figuring. In so doing he has learned the principles according to which the leading of the inner parts can be effected, in four-part writing, in the most smooth and connected manner possible. For the leading of the soprano only the general rules for leading the parts have as yet been observed, no special attention having been paid to this highest part. The pupil has had no opportunity to write an original bass. Now, before proceeding to the next exercises, which form the transition to contrapuntal studies, we shall set forth a few rules concerning the style of the vocal chorus in general, and the leading of the soprano and bass in particular.

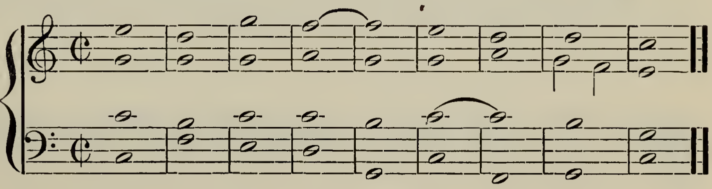
Although in strict composition each part should have a melodious leading, one part will have, in plain four-part writing, a predominant melody. We call this predominant melody the *cantus firmus* (Italian *canto fermo*). To it the remaining parts must subordinate themselves as an accompaniment, so far as their own free and independent leading admits. The *cantus firmus* may be given to any part. It it lie in the bass or an inner part, we must take the highest part or soprano so far into consideration as not to treat it like a middle part, or a mere filling. Although the principal melody, the *cantus firmus*, is given to another part, the soprano must also be led in such a way as not quite to lose the character of a highest part with a leading melody. The first rule should be, not to let the soprano hold the same tone through more than three measures, and to lead it melodiously whenever possible by steps or by easy vocal intervals. We must take care, moreover, that the inner parts are not spread out too far, even in open position. The most practical plan is, never to allow a wider interval than an octave between the alto and tenor. Should a wider interval occasionally become necessary, it must be for as short a time as possible, and it is best to narrow the interval as soon as may be. A passage for vocal chorus like the one at 333 cannot sound well, because the inner parts are too far apart.

333.

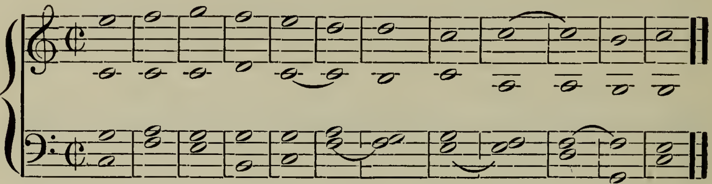


Although each individual part in this example is correctly led, and the progressions between the chords are in no way constrained or unnatural, the entire example is nevertheless to be condemned because of the excessively wide interval between the inner parts. By interchanging the inner parts we make the improvement shown at 334.

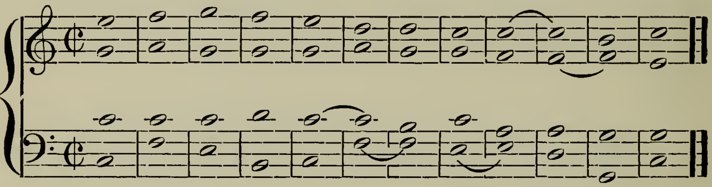
334.



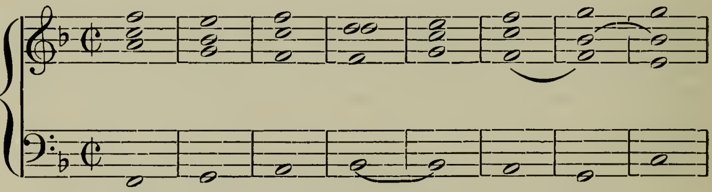
The interval between the soprano and alto should also exceed an octave only in very exceptional cases; the following example is consequently to be condemned, though there is nothing amiss in the leading of the parts or the progression of the chords.

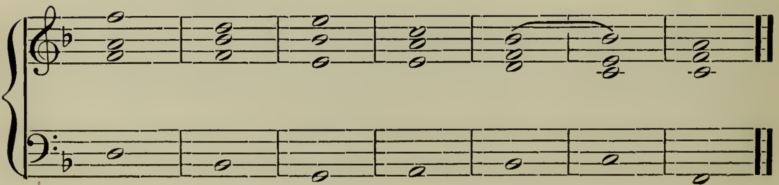
335.


By inverting the inner parts, we obtain the improved reading given below.

336.


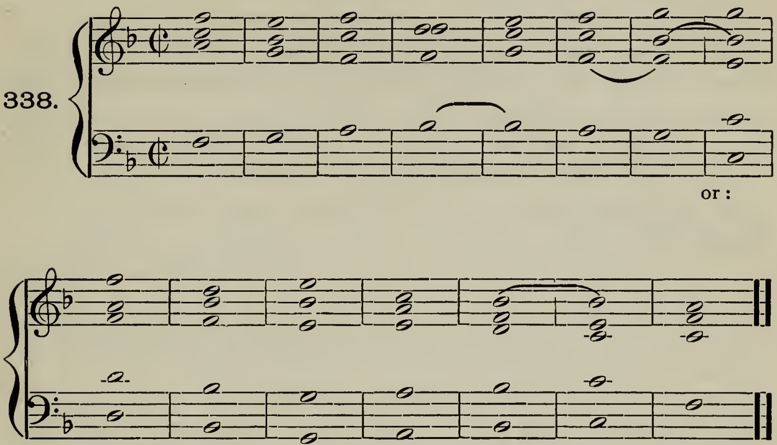
The interval between the tenor and bass, and that of the group of the three highest parts from the lowest — the bass tone determining the chord, must also not be very wide for too long a time.

337.




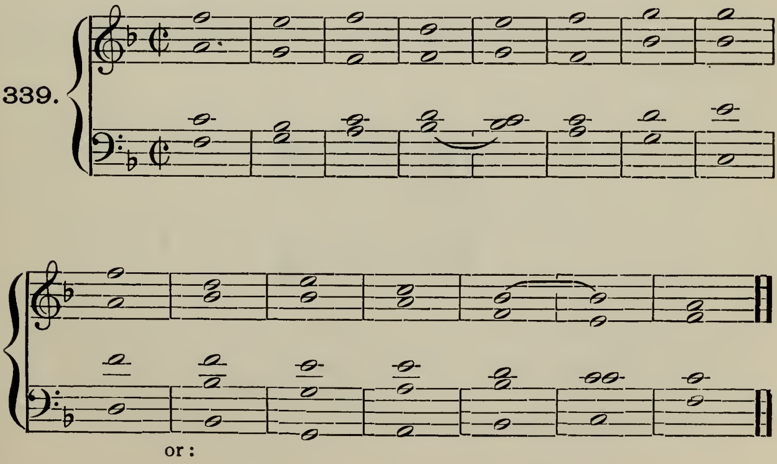
By transposing the bass into the higher octave, Ex. 337 would be made to sound better.

338.



The effect would be still further improved by exchanging the position of the inner parts at the beginning; instead of the chord of the seventh in measure 7 we should then write the triad on the same degree, the inner parts being led thereafter as at first.

339.



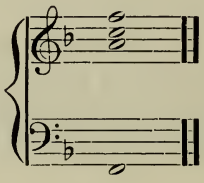
In writing for vocal chorus the following rules are therefore to be observed:

1. Do not keep the voice-parts long at either a *very high* or a *very low* pitch.

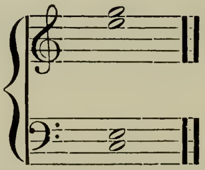
At a very high pitch the voices of the chorus find it hard, and under certain conditions impracticable, to sing *piano* or *pianissimo*. The intonation then generally grows uncertain and wavering, even with very good choruses. At a very low pitch an energetic *forte* or *fortissimo* cannot be brought out. When the parts are to enter on the highest tones of their compass, it should be required only in *forte* or *fortissimo*; if on the lowest tones, only in *piano* or *pianissimo*.

2. The several voice-parts of the chorus must not be *spread too far apart*.

When the voice-parts lie far apart, they are unable to produce one and the same *nuance* (shade of expression) together. The following chord can be sung *forte* or *fortissimo* by the three highest parts at the pitch here given; but the bass will sound weak in comparison:



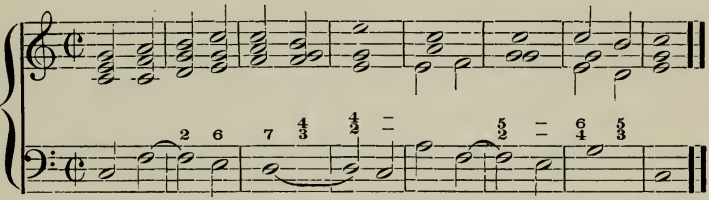
The effect is still worse when there is a wide interval between the inner parts:



When the intervals between the chorus-parts are wide, the voices cannot support each other, and confidence and purity of intonation must suffer in consequence.

The lowest part, whether it be the bass or some part taking its place — in female chorus the alto, and in three-part composition, at times, the tenor — must always receive particular attention. It can bear a prolonged dwelling on one tone still less than the soprano. Excepting in an organ-point, a tone should be held only when it prepares a suspension, a chord of the second, or a chord of the third, fourth and sixth; also in the closing cadence in the progression of the $^{6}_{4}$ chord derived from the triad on the 1st degree to the dominant triad or chord of the seventh.

340.

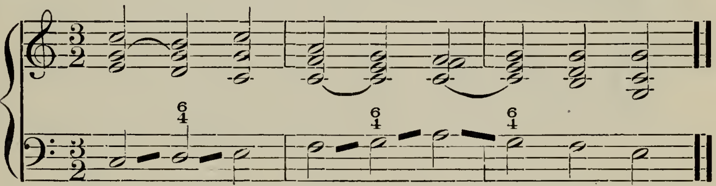


The $^{6}_{4}$ chord always produces the impression of a close when it appears unprepared on the strong beat. Except at the close, it should therefore be employed only in the form of a *passing-chord* (comp. §57). Such is the case

1. When the fourth of the $^{6}_{4}$ chord is prepared;
2. When the root of the $^{6}_{4}$ chord, that is, the fifth of the original chord, progresses stepwise as a passing-note between other tones.

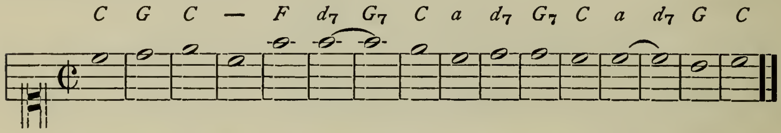
But both conditions must be fulfilled together, in order to give the $^{6}_{4}$ chord the character of a passing-chord; e. g.

341.



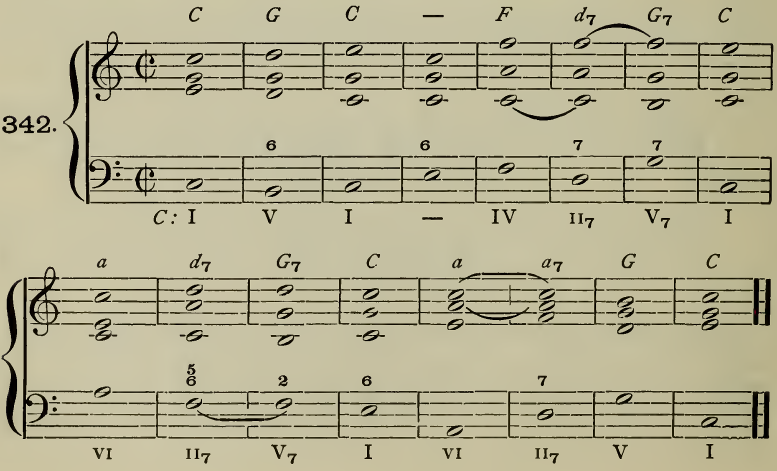
The pupil should now attempt to write, to a *cantus firmus* (given melody) in the soprano, the chords marked above the melody in the three other parts, effecting the progressions of these chords according to the familiar rules for the leading of the parts. We have marked the major triads of the key with capitals, and the minor triads with small letters; for chords of the seventh the figure 7 is added to the letter.

The following *cantus firmus* in the soprano contains, in measure 1, the octave of the root of the triad on the 1st degree in C-major; in meas. 2, the fifth of the dominant triad; in meas. 3 and 4, the third and the octave of the root of the tonic triad. In these measures the bass must neither be held, nor form a $\frac{6}{4}$ chord in the second measure; in such cases, only the fundamental position and the chord of the sixth can be employed. In meas. 5 the soprano takes the octave of the root of the subdominant triad; in meas. 6, the third of the chord of the seventh on the 2nd degree; in meas. 7, the root of the dominant chord of the seventh; in meas. 8, the third of the tonic triad; in meas. 9, the third of the triad on the 6th degree; in meas. 10, the root of the chord of the seventh on the 2nd degree; in meas. 11, the fifth of the dominant chord of the seventh; in meas. 12, the octave of the root of the tonic triad; in meas. 13, the third of the triad on the 6th degree; in meas. 14, the seventh of the chord of the seventh on the 2nd degree; in meas. 15, the third of the dominant triad; and in the last measure, the octave of the root of the tonic triad.

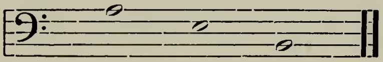


This *cantus firmus* may be worked out as follows:

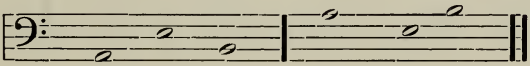
342.



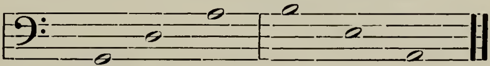
From the leading of the bass in No. 342 the pupil will perceive, that this part progresses in steps, or in skips of a third, fourth, fifth, or sixth, in contrast to the quieter leading of the inner parts. All kinds of skips easy to take with the voice may be written in the bass; whereas all intervals which are difficult to take are forbidden. For instance, even a succession of two fourths in downward progression is not good.



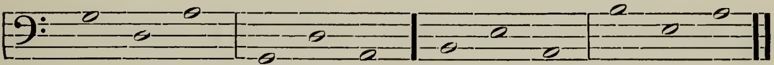
This should be avoided; the skip of a fifth followed by a fourth, or *vice versâ*, being written instead.



Two *ascending* skips of perfect fourths, like those in the last measures of Ex. 342, may be written without hesitation, as they offer no difficulty whatever to the singer. Carefully avoid, on the contrary, two successive fifths, whether ascending or descending.

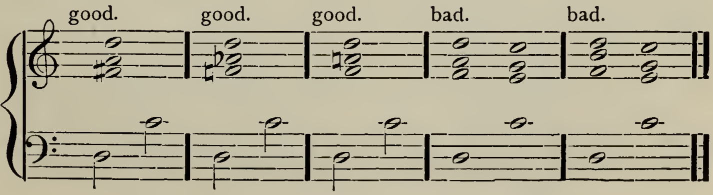


Such skips may be improved by changing one of the fifths to the skip of a fourth in the opposite direction; e. g.



The *ascending* skip of a minor seventh is allowable only when the seventh is added thereby to the triad; but it should never be written between two different chords.

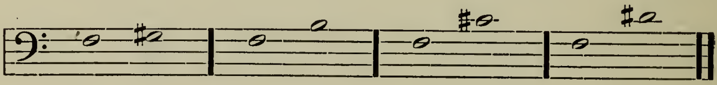
343.



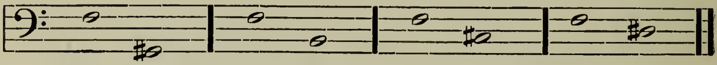
The *descending* skip of a minor seventh is not to be recommended even in the same chord.

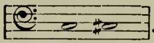
The skip of a major seventh in either direction must be sedulously avoided. Further, all augmented intervals must be avoided, to which end they should be changed into descending diminished ones. The pupil has therefore to write, instead of

344.

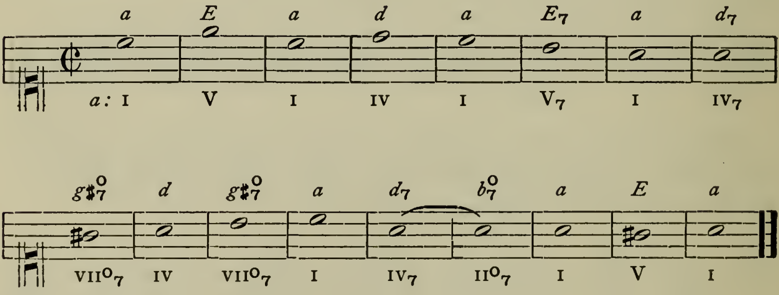


345.



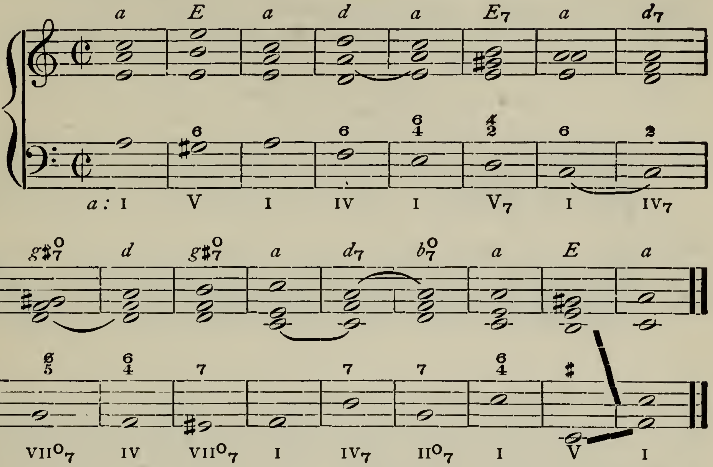
the ascending augmented second, the descending diminished seventh; instead of the ascending augmented fourth, the descending diminished fifth; instead of the augmented sixth, the diminished third. The only allowable augmented interval in melodic progression is the augmented prime . The skip of a perfect octave is permitted in either direction.

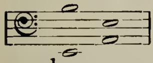
Below we give the working-out of the following *cantus firmus* in *a*-minor.



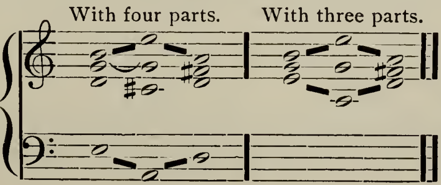
To this *cantus firmus* we have added the degree-numbers of those chords which we propose to use, according to the letters set above the notes, in working out this exercise. The chromatic raising of the 7th degree in minor is indicated only where that note is given in the *cantus firmus.*

346.



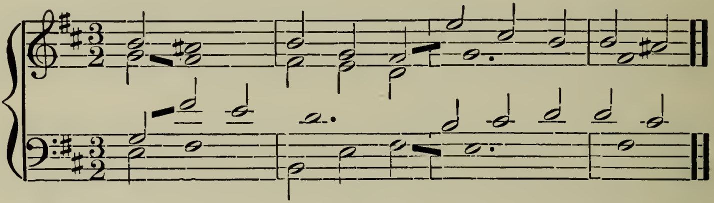
The above example shows us, besides the prepared entrance of the $\frac{6}{4}$ chords derived from the triads on the 1st and 4th degrees (meas. 5 and 10), the free entrance of the $\frac{6}{4}$ chord derived from the triad on the 1st degree (closing cadence in meas. 15). In meas. 7, the *C* in the bass prepares the seventh of the chord of the seventh on the 4th degree, and for this reason is held in the next measure. The seventh *C* taken by the tenor in measure 13, must be led a step upwards, because the bass takes *B*, the proper tone of resolution. Finally we find, in the tenor and bass between the two last measures, the progression *E–B* to *A–E* in contrary motion . This progression, which in parallel motion would produce parallel perfect fifths, is allowable between any parts in *contrary motion.* We find it employed by the most eminent classic masters. In two-part writing this progression is, of course prohibited, empty fifths then being forbidden. But in four-part or three-part writing it may occur even between the outer parts.

347.



Parallel fifths can thus be avoided by contrary motion, such progressions being permitted when the leading of the other parts is natural and correct. Parallel octaves, however, can in no case be avoided by contrary motion, and progressions like the following at No. 348 are entirely incorrect. (Comp. Ex. 343 above).

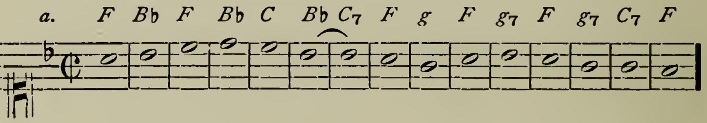
348.

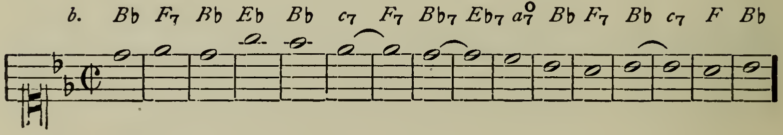


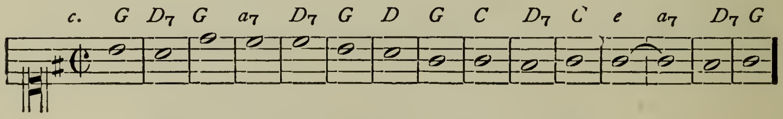
The following exercises in working out a *cantus firmus* are now to be written out in accordance with the suggestions given for Ex. 342 and 346, employing four different clefs. (Comp. App. I, p. 270, and App. II, p. 284.)

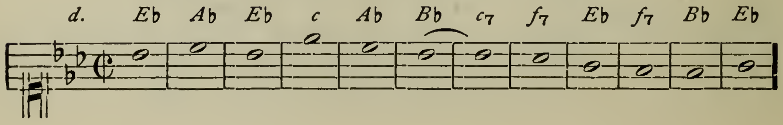
Exercises.

349.



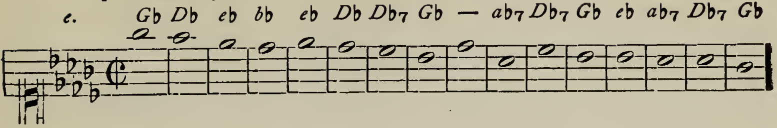




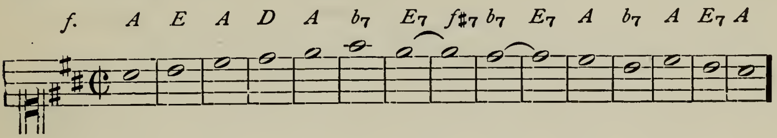


Open harmony.

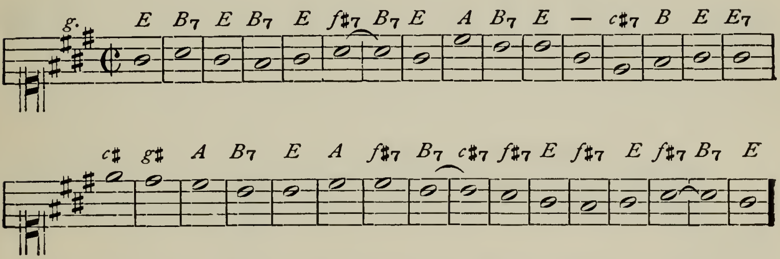
e.



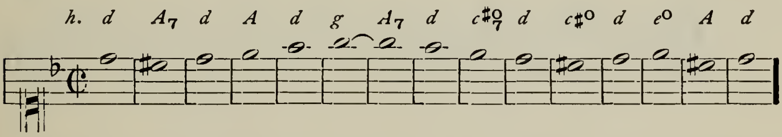
f.



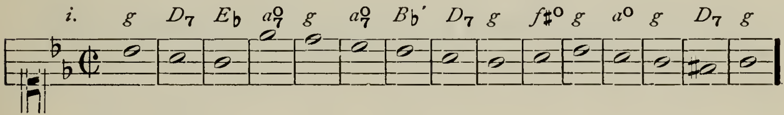
g.


E B7 E B7 E f♯7 B7 E A B7 E — c♯7 B E E7
c♯ g♯ A B7 E A f♯7 B7 c♯7 f♯7 E f♯7 E f♯7 B7 E

h.

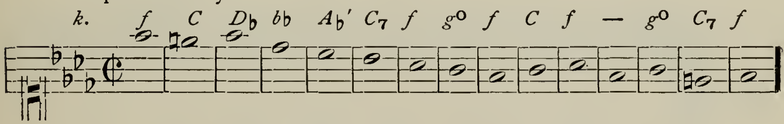


i.

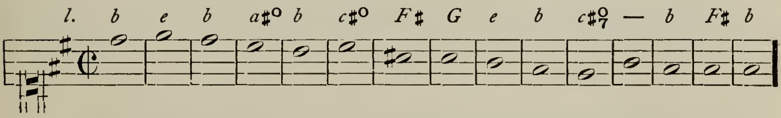


Open harmony.

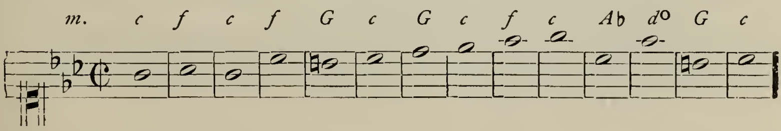
k.



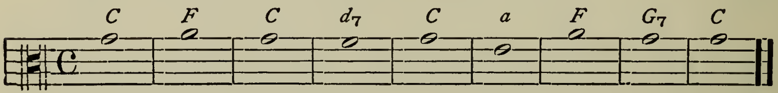
l.

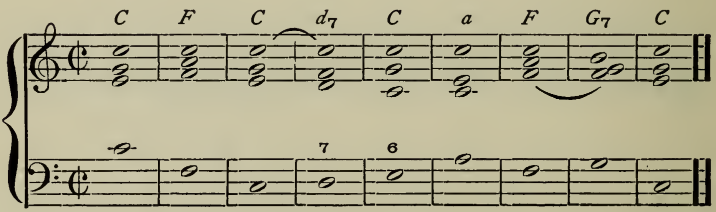


m.

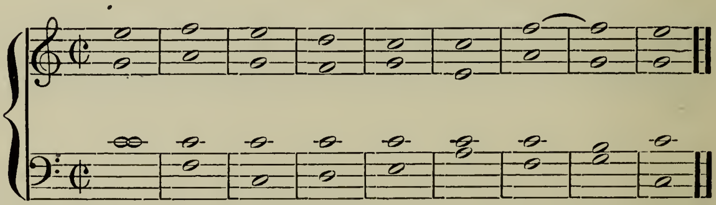


§62. The task presents far greater difficulties when the *cantus firmus* is taken by one of the inner parts. In working out such exercises, the soprano requires very special attention ; it must never be treated like an inner part. It should always have, as far as may be, a leading melodious part side by side with the *cantus firmus*. The following *cantus firmus* would entirely rob the soprano of its peculiar character, in the working-out given at No. 350.



350.


By giving the tenor-part to the soprano, and taking the soprano as tenor, we obtain a much more favorable result than before.

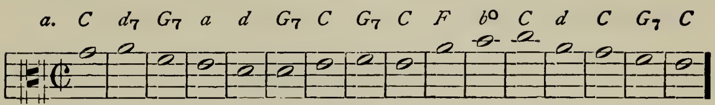
351.


The following exercises can generally be worked out conveniently in open harmony, when the *cantus firmus* is given in the alto. In a single case, the exercise can be begun in close harmony. (Comp. App. I, p. 271, and App. II, p. 287.)

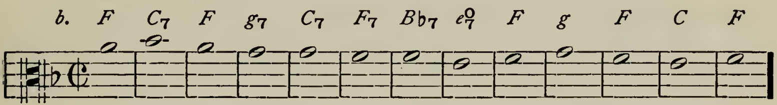
Cantus Firmus in the Alto.

352.

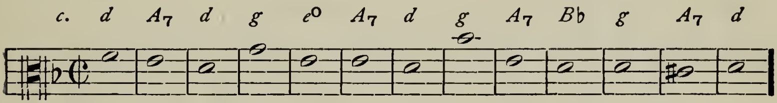
a.



b.

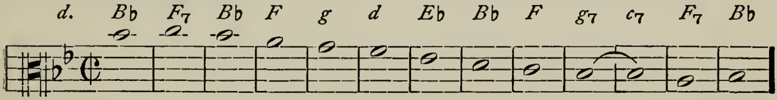


c.

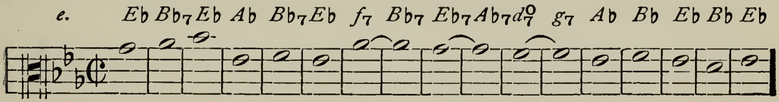


Close harmony.

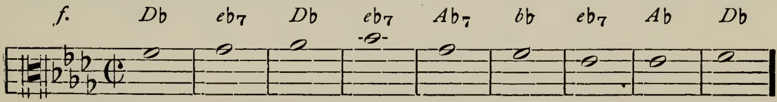
d.



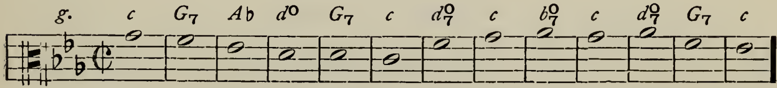
e.



f.

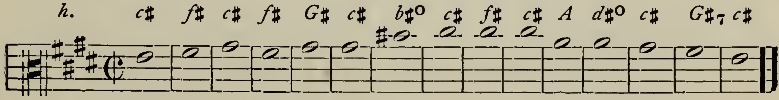


g.



Close harmony.

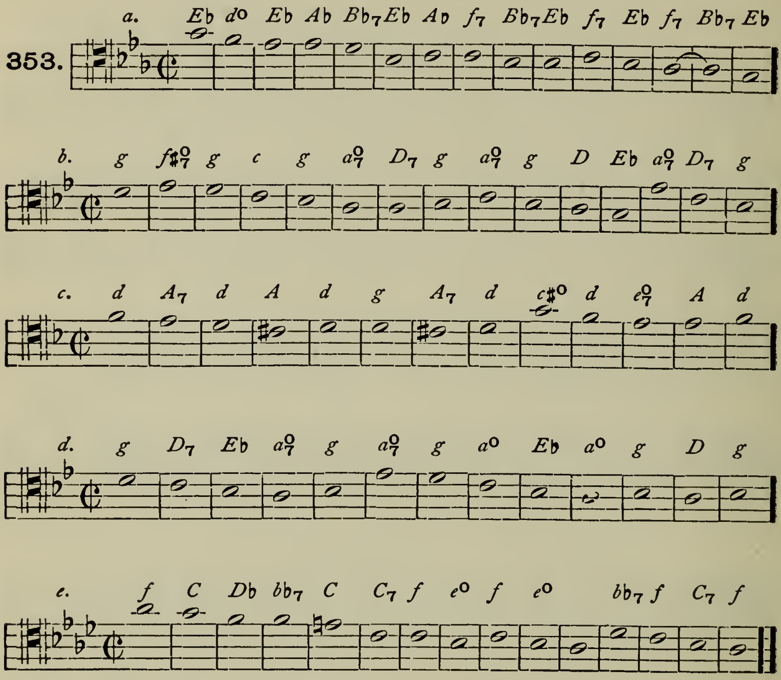
h.



In working out the following examples, in which the tenor takes the *cantus firmus*, begin in *close* harmony. (Comp. App. I, p. 271, and App. II, p. 288.)

Exercises.

353.


a. Eb d° Eb Ab Bb7 Eb Ab f7 Bb7 Eb f7 Eb f7 Bb7 Eb
b. g f♯°7 g c g a°7 D7 g a°7 g D Eb a°7 D7 g
c. d A7 d A d g A7 d c♯° d e°7 A d
d. g D7 Eb a°7 g a°7 g a° Eb a° g D g
e. f C Db bb7 C C7 f e° f e° bb7 f C7 f

CHAPTER XXI.

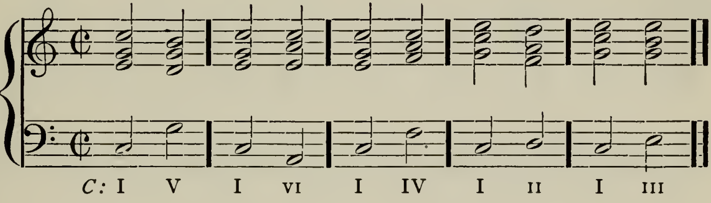
On Modulation.

§63. The exercises in this text-book have made the pupil familiar with a variety of modulatory transitions. He knows that under the term "Modulation" a departure from the key predominant in the piece is to be understood. In case this principal key is to be forsaken entirely, and a movement in a new key follow, in which this new key shall be predominant, the new key must be thoroughly established, unless the two keys are very closely related ; i. e. a *modulation* to the new key must first be effected. We shall now add a few suggestions on modulating, showing the pupil

1. How to reach any key from a given key ;
2. How to establish the foreign (new) key firmly, in order to bring the modulation to a definite termination.

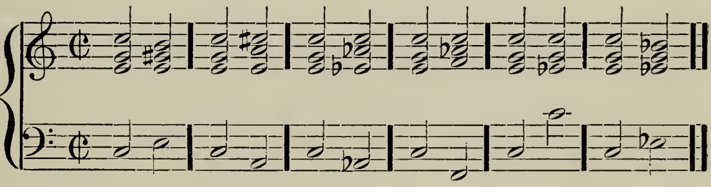
A new key is not firmly established when one has heard merely its tonic triad. The sounding of this chord alone does not fix the key. When we hear the following chords, they all impress us as belonging to *C*-major.

354.



But even in case a second chord cannot be classed as belonging to the key, its mere entrance on the *weak* beat will never awaken the impression that the chord is intended as the tonic triad of a new key. It impresses us, for the present, as a chord foreign to the previous key, which begins a modulation ; but not as the tonic triad of a newly established key.

355.

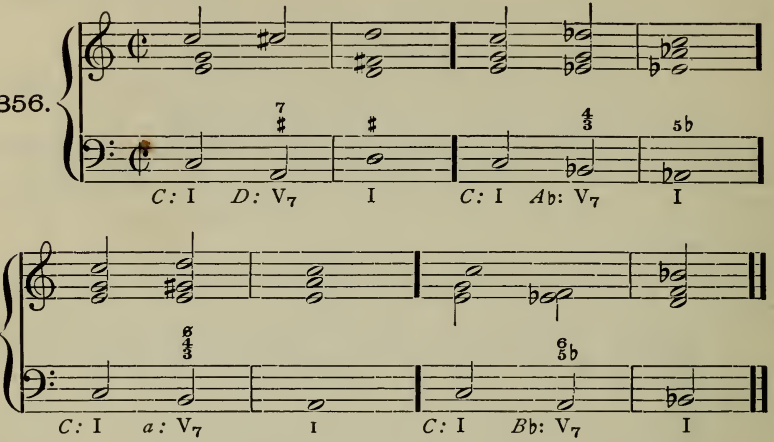


We can establish a new key only under the two following conditions :

1. In duple rhythm, the tonic triad must fall on the first or strong beat ;

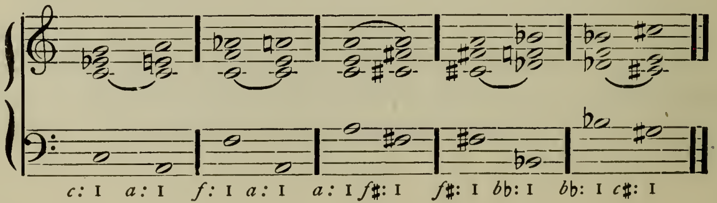
2. It must appear as a cadence-like resolution of the dominant chord of the seventh.

356.



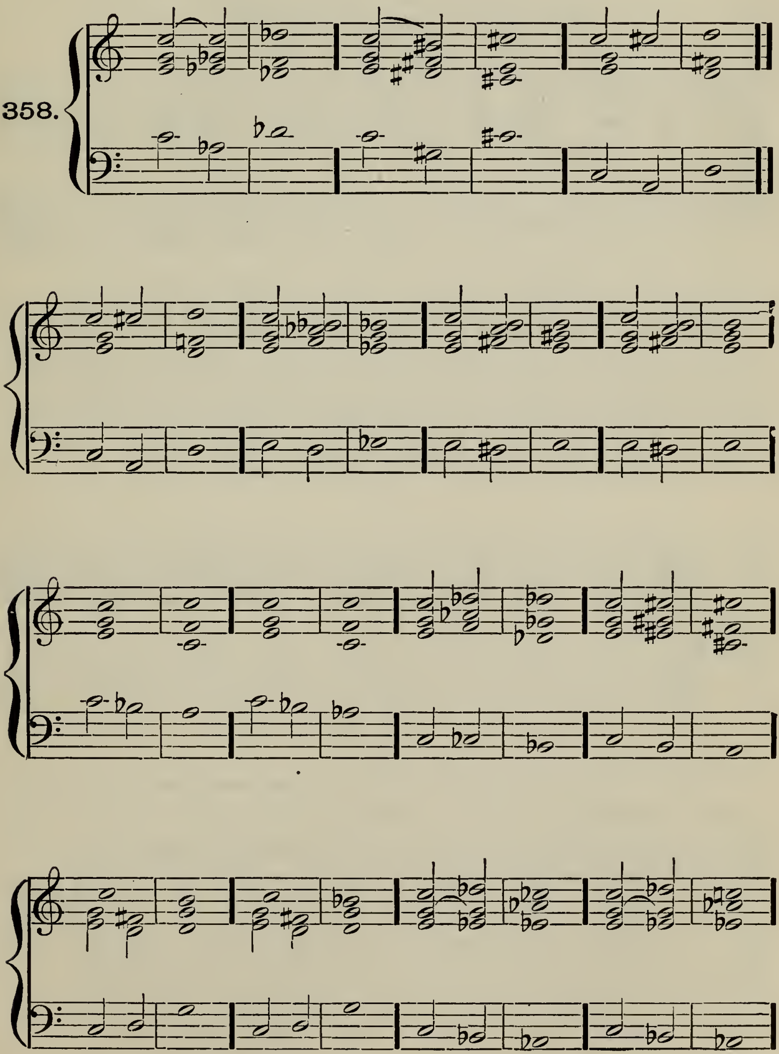
Taking the tonic triad of any key as a starting-point, one might easily reach the dominant chord of the seventh in almost any key, the tonic triad having in nine cases either one or two (in one case as many as three) tones in common with the 12 dominant chords o the seventh, while in the remaining 3 cases a connection can easil be effected by self-evident progressions and with correct leadings Most of these progressions, however, would have a more or less brusque, harsh, and inapt effect, even in the cases where *one* common held tone apparently forms a natural bridge between them. The rule does not invariably hold good, that any progression between two chords having one tone in common is at all times and in all cases agreeable and harmonious, when the common tone in question is held in the same part in both chords. The progressions at No. 357 cannot be considered good, in spite of the common tone held in the same part, and although the leading of the parts appears correct, because no relationship whatever subsists between the chords connected in this manner.

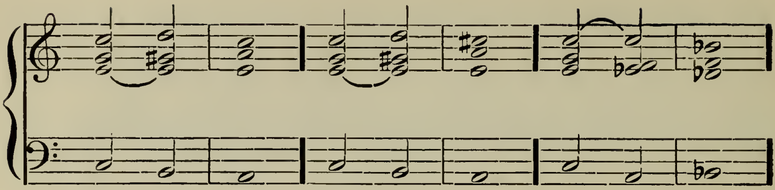
357.

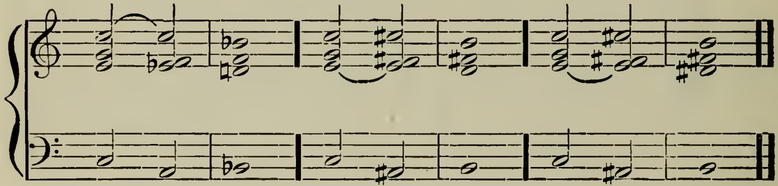


It follows, that a direct progression of the tonic triad in *C*-major to any of the 12 dominant chords of the seventh, and their cadence-like resolution in their respective 24 major and minor keys, will not suffice in most cases to establish a new key. The progressions given under 358 have, with few exceptions, a forced and constrained effect.

358.

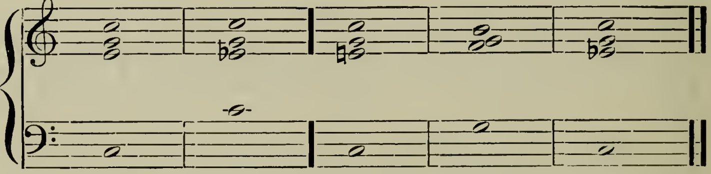






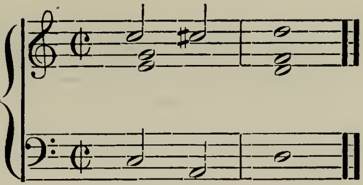
Indeed, even the sudden succession of the tonic triads of like-named major and minor keys, despite the fact that they possess *two* tones in common, has a somewhat singular effect, which is not always neutralized by the mediation of their common chord of the seventh, the intervals of which are precisely alike in both ; e. g.

359.



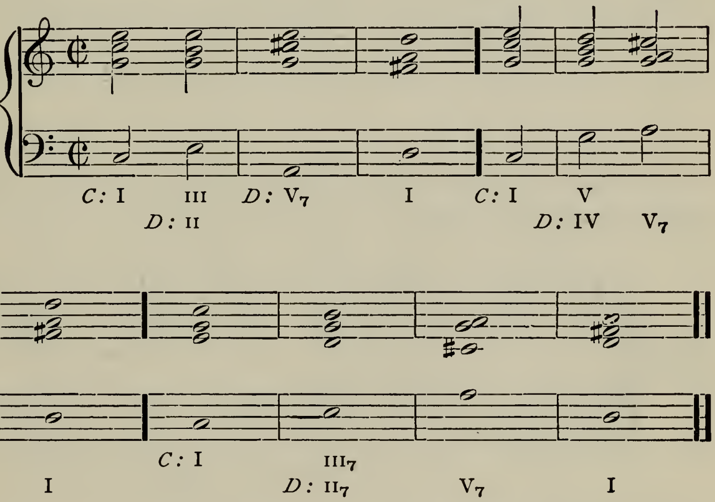
We shall therefore do well to introduce the dominant chord of the seventh, belonging to the key we desire to reach, after another chord which is related both to the triad with which we begin and to the chord of the seventh in question. This we shall do in all cases where the keys to be connected by modulation are not directly related. In order to modulate from *C*-major to *d*-minor, we can take the dominant chord of the seventh in *d*-minor directly after the *C*-major triad, and resolve it to the tonic triad in *d*-minor. This progression will not have a specially harsh effect, simply because the tonic triad of *d*-minor is also found on the 2nd degree in *C*-major; this forms their relationship.

360.



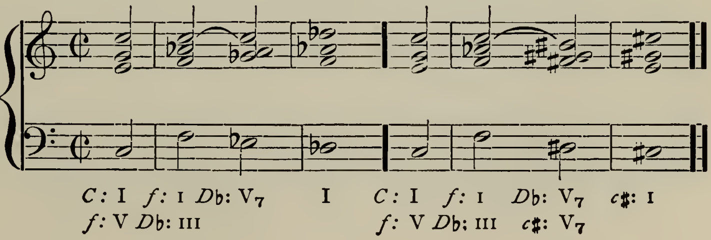
The modulation to *D*-major in like manner would be much harsher, because the triad *D–F♯–A* is not contained in the key of *C*-major. We shall do better to interpolate, after the *C*-major triad, some chord common to both keys.

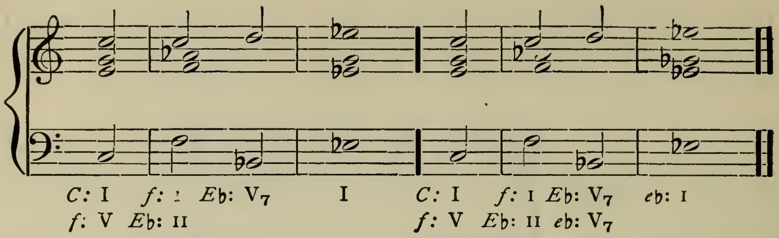
361.

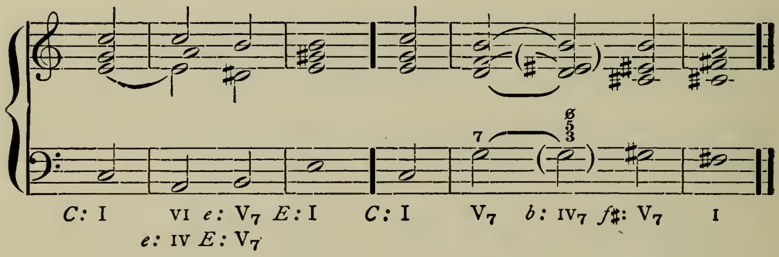


We effect the following transitions in the same way.

362.

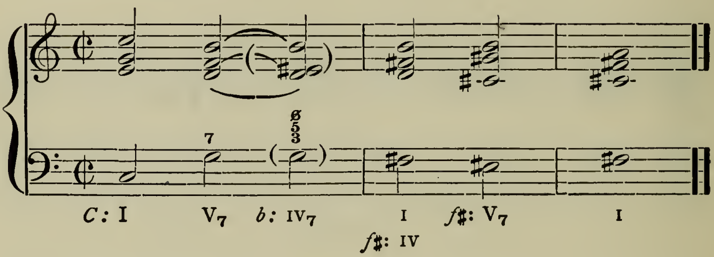


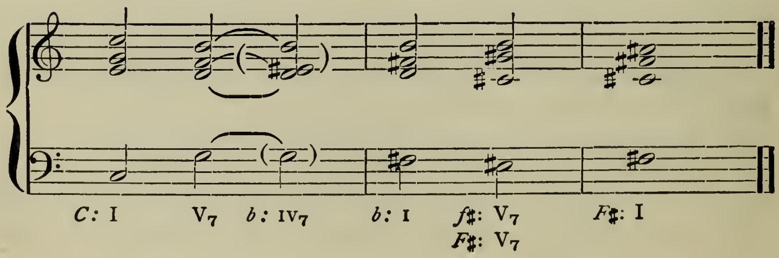

C: I *f:* I *E*♭: V_7 I *C:* I *f:* I *E*♭: V_7 *e*♭: I
f: V *E*♭: II *f:* V *E*♭: II *e*♭: V_7


7
5
3
C: I VI *e:* V_7 *E:* I *C:* I V_7 *b:* IV_7 *f*♯: V_7 I
e: IV *E:* V_7

The last transition from *C*-major to *f*♯- minor will have a still milder effect, if we first resolve the augmented chord of the fifth and sixth to the *b*-minor triad.

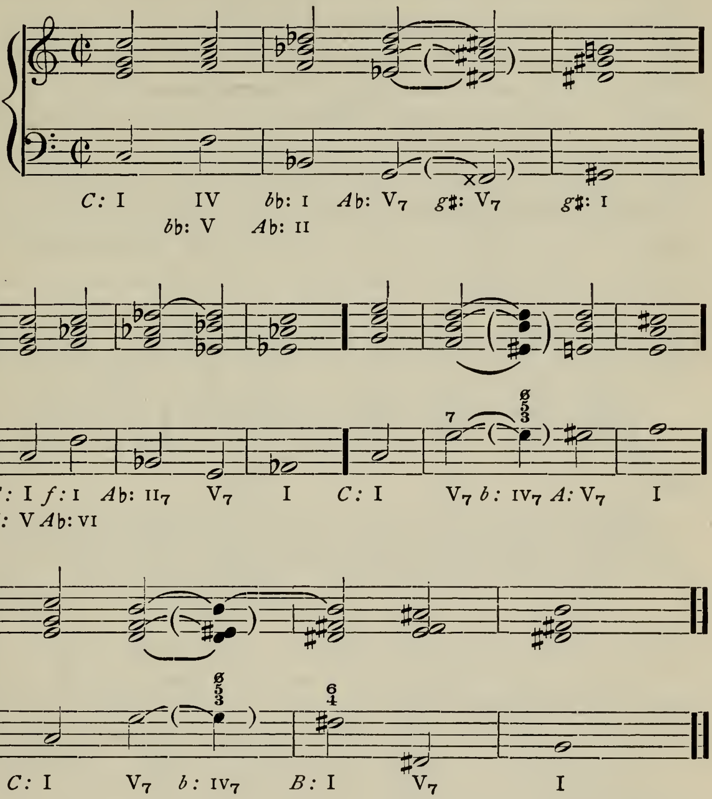
363.





When modulating into remote keys it is best, in any event, to employ several chords, and bring about the transition gradually.

364.



§64. The last modulation shows us

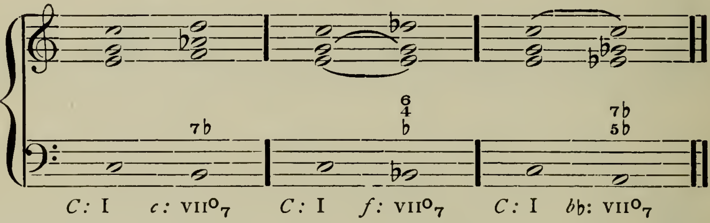
1. The resemblance in sound between the dominant chord of the seventh and the augmented chord of the third, fifth, and sixth.
2. The entrance of the $\frac{6}{4}$ chord on the strong beat.

The enharmonic change of the dominant chord of the seventh for the augmented chord of the third, fifth, and sixth yields us one of our best and most natural resources of modulation. As we use both chords in major and minor, and are able to resolve the augmented chord of the fifth and sixth to the $\frac{6}{4}$ chord derived from the tonic triad, we can easily and agreeably connect very remote keys by means of a few chords.

As remarked above, the $^6_4$ chord produces, when it enters on the strong beat, a very striking impression of a close. Although not absolutely indispensable in the actual closing cadence, it strengthens the latter, and materially heightens the feeling of a complete close.

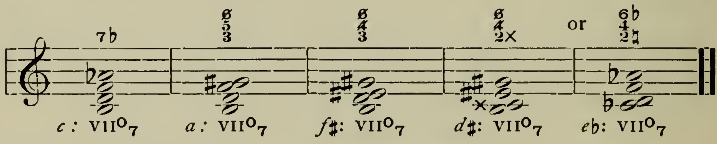
§65. The most universal medium for modulating easily and rapidly from one key into another, is the *diminished chord of the seventh.* It may enter freely anywhere, without preparation of the seventh. It admits of very various resolutions and progressions in major and minor, and by means of the enharmonic change of one or several or all of its tones it can pass over to the most diverse keys. To begin with, we shall show how easily it may be introduced, as in No. 365. Here we let the diminished chords of the seventh belonging to *c*-minor, *f*-minor, and *b*♭-minor, on the 7th degree in these keys, follow the tonic triad of *C*-major directly.

365.

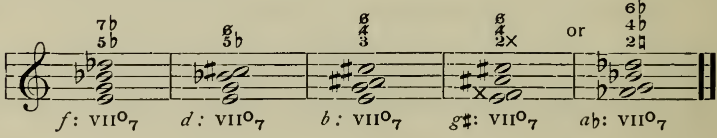


Each of these diminished chords of the seventh may, however, be assigned to four different minor keys by enharmonically changing its intervals and their names.

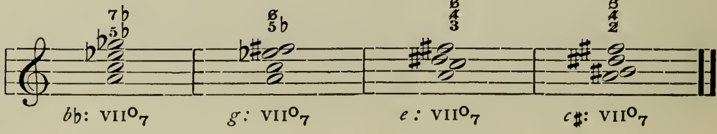
366.



367.

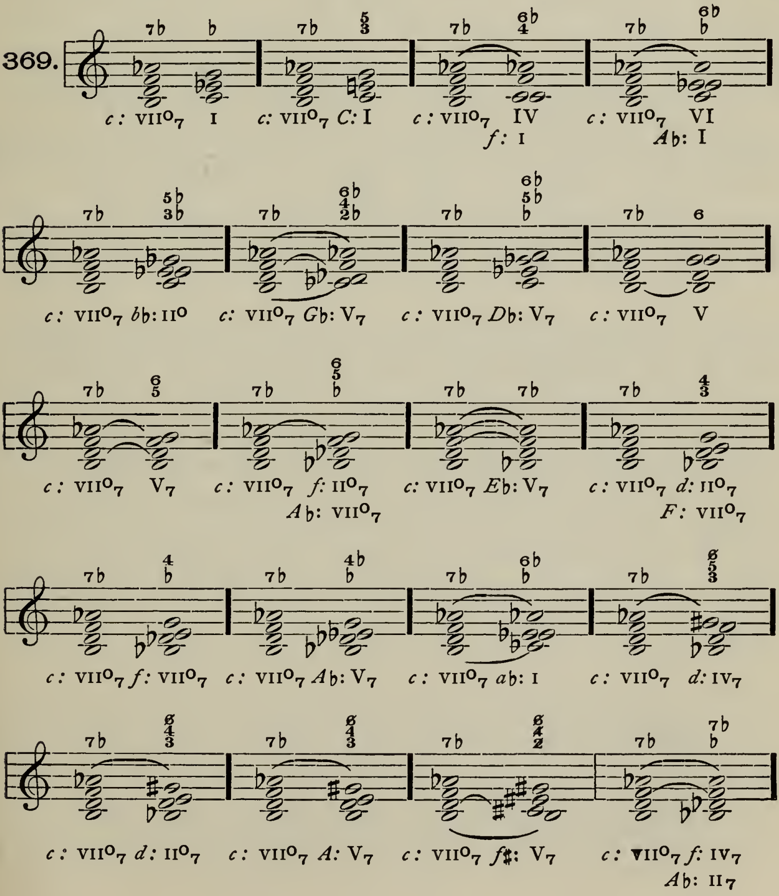


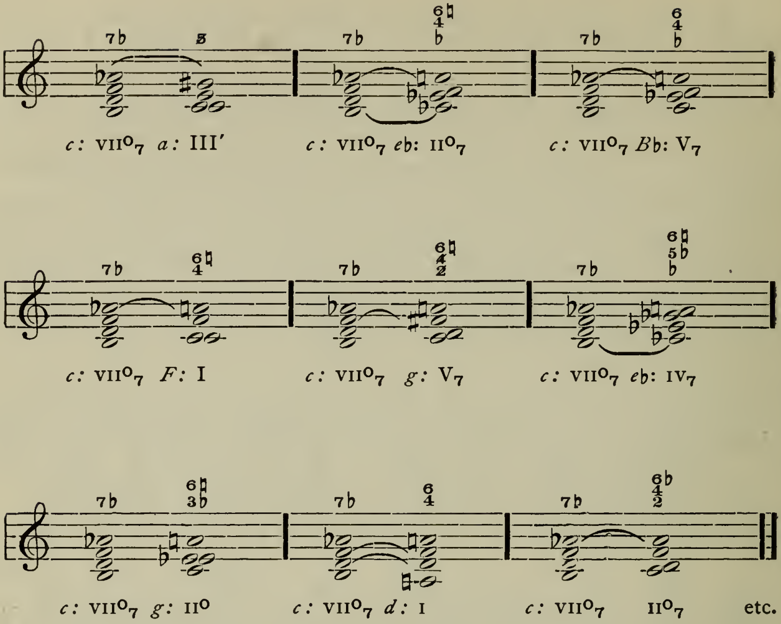
368.



As each of these fundamental positions and inversions may be resolved to the tonic triad of that *minor* key to which it belongs, and equally well to the tonic triad of the *major* key of the same name as that minor key, and also to other keys, at pleasure ; — and as any diminished chord of the seventh may follow a triad (compare Ex. 365) — it follows, that three forms of the diminished chord of the seventh afford the cue to all major and minor keys. On examining but a few of the possible resolutions of the diminished chord of the seventh on the 7th degree in *c*-minor, we instantly perceive how flexible a medium of modulation we possess in the diminished chords of the seventh.

369.

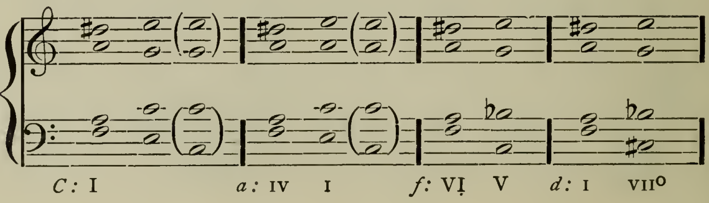


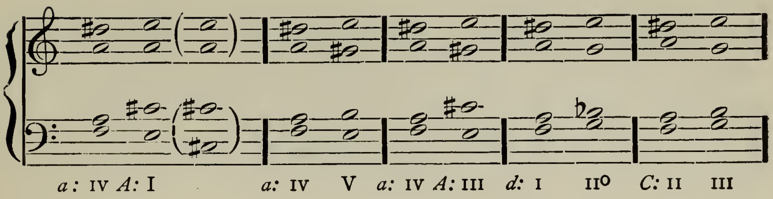


By writing the chord *B-D-F-A♭* with the enharmonic changes of its tones exhibited in Ex. 366, its possibilities of progression to other keys are still further increased. It would lead us too far to indicate all these progressions; we prefer leaving this to the pupil, so that he may become familiar with the manifold resolutions of the diminished chords of the seventh according as they are written.

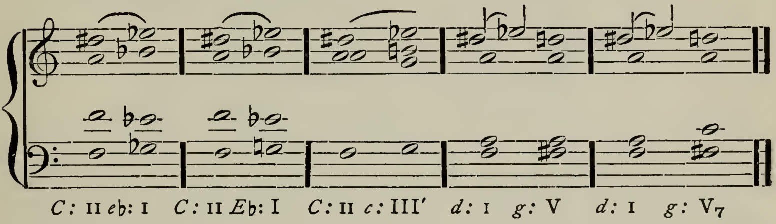
§66. A further means of modulation is found in the augmented chord of the sixth, which, as it belongs to four different keys (comp. §50), can resolve and progress to these as well as various others; e. g.

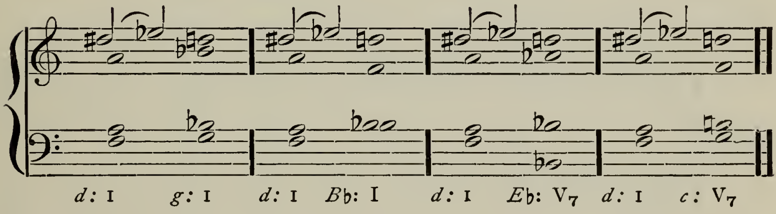
370.





With the enharmonic change.

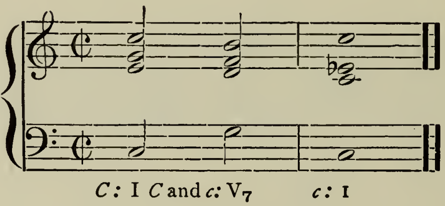




In the freer resolutions of the chords of the seventh the pupil has already become acquainted with a large number of other means of modulation. All these will be employed in practice; but the pupil should continually bear in mind, that it is best not to bring in the modulation with too great suddenness. In free composition striking modulations may, to be sure, sometimes produce a most extraordinary effect, as intended by the composer; but when we desire to write an isolated modulation outside the limits of a large composition (such as a short interlude to connect two pieces of music in different keys), we shall do well to abstain from direct modulations of frequently rough effect, and rather to gradually prepare the new key. The softer and more gradual the passage between remote keys can be made, the better will be the effect. A short example will suffice to render this point clear.

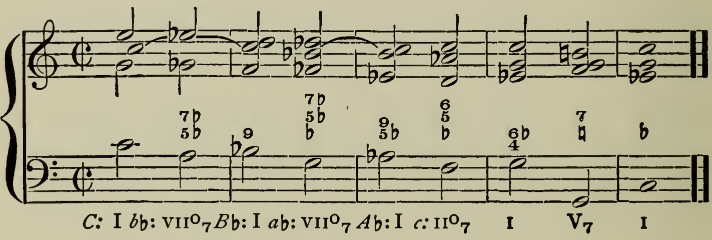
The keys of *C*-major and *c*-minor have the same dominant chord of the seventh. Were we to effect the transition from *C*-major to *c*-minor solely by the aid of this chord in combination with the tonic triad—the chords forming the authentic cadence in *c*-minor—the hearer would hardly obtain the impression of a modulation to *c*-minor; e. g.

371.



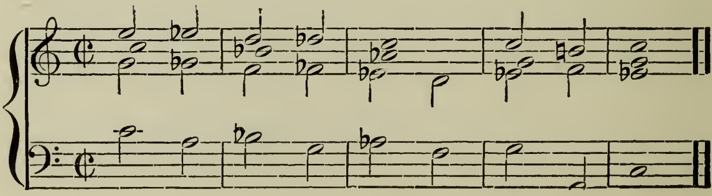
The following modulation in 372 is far more satisfactory, because, beginning with *C*-major, it employs chords more nearly related to *c*-minor, and of a nature to efface the effect of *C*-major.

372.



In the second and third measures of Ex. 372 we have suspensions. Suspensions are always adapted to render the connection of chords more intimate. We therefore especially recommend their employment in modulating. Without the suspensions, the progressions of the triads of *C*, *B*♭, and *A*♭ would appear less smooth.

373.



Finally, in Ex. 372 and 373, the modulation to *c*-minor is finished by a complete closing cadence. This cadence is necessary in order to establish the new key, and to bring the modulation to a final close.

CHAPTER XXII.

On the Closing Cadence.*

§67. The forms of close necessary to finish a piece of music are of an extremely simple nature. We possess, in fact, only two, the first of which, the authentic close, is by far the most often employed, because it produces the impression of a complete close more fully than the plagal close, which is the second and less used form. (Comp. §18). The authentic close is formed by the succession of the dominant chord — either as a triad or chord of the seventh — and the tonic triad, the dominant chord occupying the weak beat, while the tonic triad enters on the strong beat. This form of close is materially strengthened by the preparation of the dominant chord, which is brought about most naturally by the chord on the 2nd degree, this latter standing in a like relation to the dominant chord in forming a cadence as does the dominant chord to the tonic. It also makes little difference, in general, whether this preparatory chord on the 2nd degree is a chord of the seventh or a simple triad; only the chord of the seventh on the 2nd degree, if used, itself requires preparation. The triad on the 4th degree, or even the chord of the seventh derived from it, are also occasionally employed as preparatory chords. Such a form of the close, introduced by the chords on the above degrees, and frequently extended by the interpolation of the tonic triad either as a chord of the sixth, or fourth and sixth, before the dominant chord, is termed the *closing cadence*.

Despite the fixed and unchangeable form of this extremely simple series of chords, the fancy of composers has varied it in many ways.

---

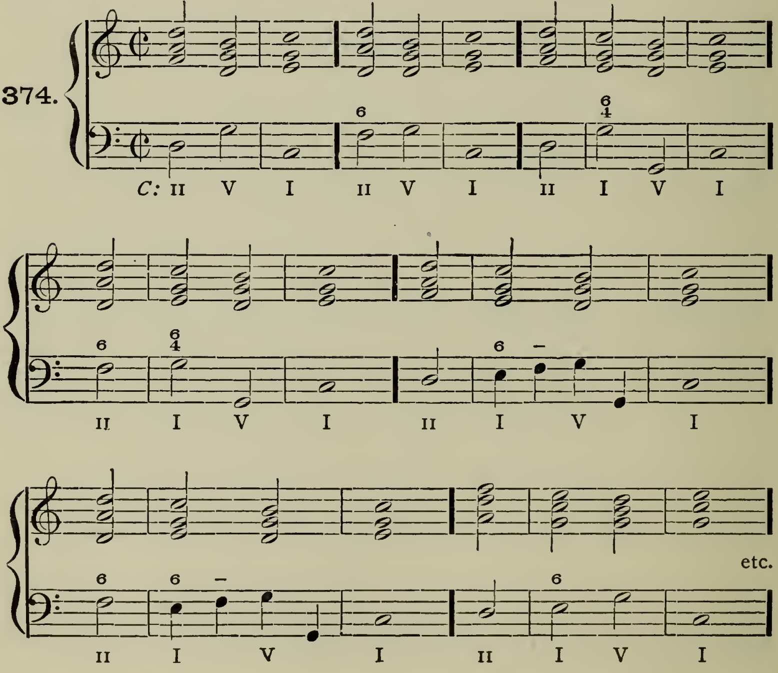
* This chapter, like those following, contains in part excerpts from articles, and in part revised articles, published as early as 1875 by the author of this text-book, under the pseudonym of L. Lübenau, as monographs in the "Musikalisches Wochenblatt."

The need of new phrases, of novel, peculiar, and striking forms of expression, has spurred composers to attempts at altering and remodelling the closing cadence. All these attempts had, of course, to be confined to the chords on the 2nd and 4th degrees, the closing chords on the 5th and 1st degrees being unalterably fixed. The attempts at presenting the chords on the 2nd and 4th degrees in different forms have, however, met with such great success, that we are ofttimes inclined to take the chord preceding the dominant chord, or the $^6_4$ chord derived from the tonic triad, for a chord remote from and entirely foreign to, the ruling key. We shall now proceed to prove, however, that such is not the case; — that, however strange the chord may sound, we always have to do merely with the chord on the 2nd or 4th degree of the ruling key with a transient chromatic alteration of one or more of its intervals, and not with chords on other degrees of other keys.

To this end we first exhibit the closing cadence as formed by the unaltered chords on the 2nd and 4th degrees.

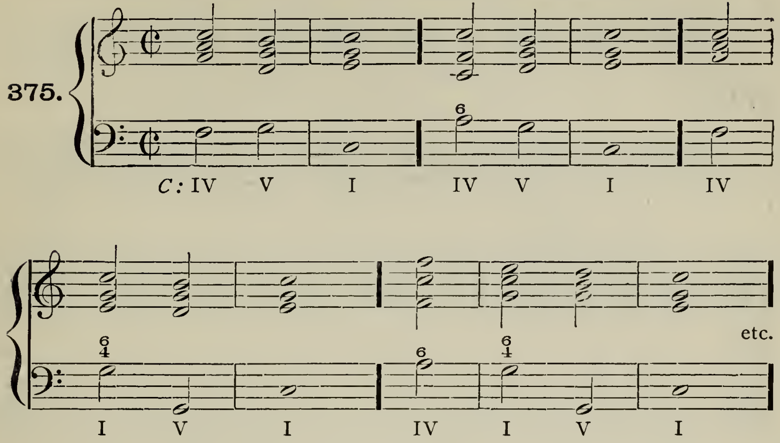
Closing cadence formed by the triads on the 2nd and 5th degrees.

374.



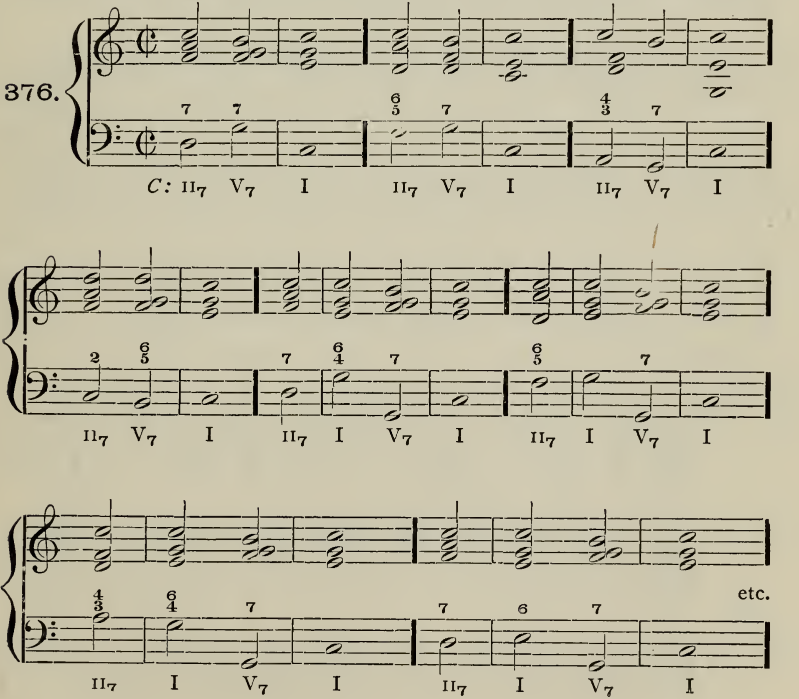
Closing cadence **formed** by the triads on the 4th and 5th degrees.

375.



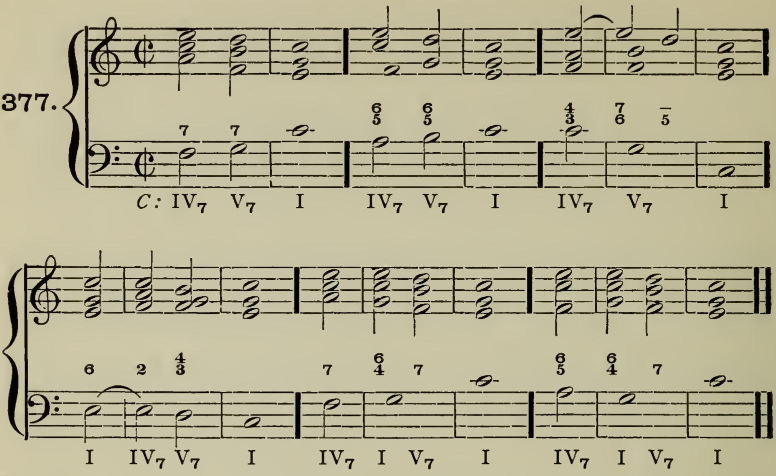
Closing cadence formed by the chords of the seventh on the 2nd and 5th degrees.

376.



Closing cadence formed by the chord of the seventh on the 4th degree.

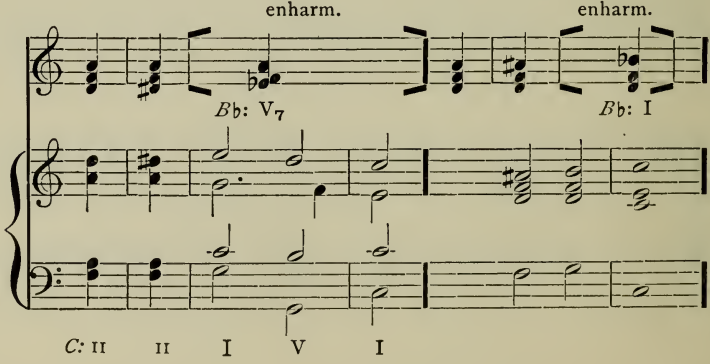
377.

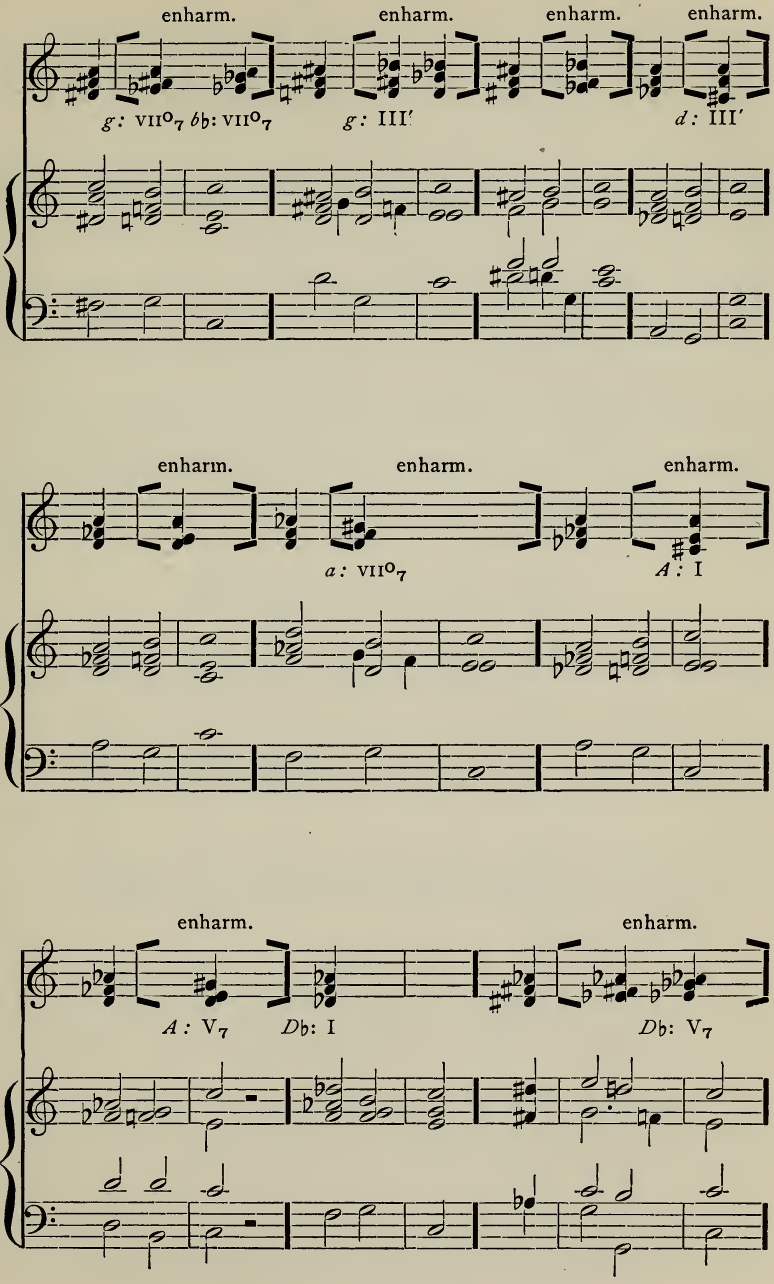

7 7
6 5 6 5
4 3 7 6 5
C: IV7 V7 I IV7 V7 I IV7 V7 I
6 2 4 3
7 6 4 7
6 5 6 4 7
I IV7 V7 I IV7 I V7 I IV7 I V7 I

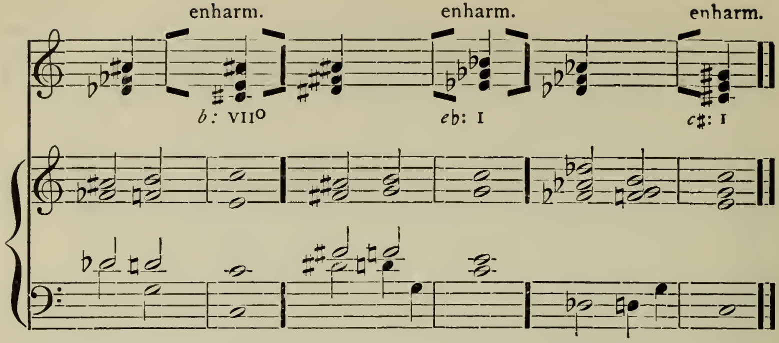
These closing cadences would be formed in the same way in minor. To pupils attempting to imitate them in minor, we recommend careful attention to the correct leading of the parts.

§68. Taking up the triad on the 2nd degree, we shall now chromatically alter its tones in the most various manner, and show, by means of enharmonic notation, the resemblance in sound thus arising to chords of foreign keys. In the case of familiar alterations of the original chord it will be superfluous to prove at length how naturally the chord, in spite of the chromatic alteration of one or more of its tones, can always be resolved to the dominant chord, or to the $\begin{smallmatrix}6\\4\end{smallmatrix}$ chord of the tonic triad preceding the latter. We have added the further progression and conclusion of the closing cadence only in the case of chord-forms having a more or less strange appearance.

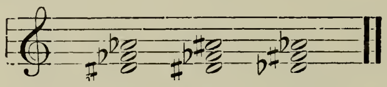
378.

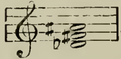



enharm.
enharm.
enharm.
enharm.
g: vii°7 b♭: vii°7
g: III′
d: III′
enharm.
enharm.
enharm.
a: vii°7
A: I
enharm.
enharm.
A: V7
D♭: I
D♭: V7

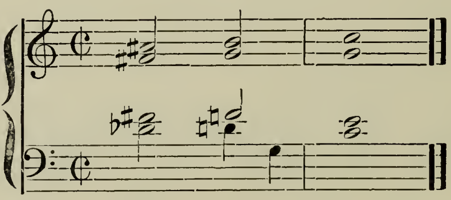


We by no means desire to recommend all these forms of the close as such, still less to assert, that all chromatic alterations of the intervals of the triad on the 2nd degree are necessarily adapted for closing cadences. For this very reason we have omitted certain altered forms, such as



But whenever such formations assume the form of a chord having, like the following , a sound similar to that of the $^6_4$ chord derived from the *F♯*-major triad, its progression to the dominant chord of the seventh in *C*-major can be readily effected.

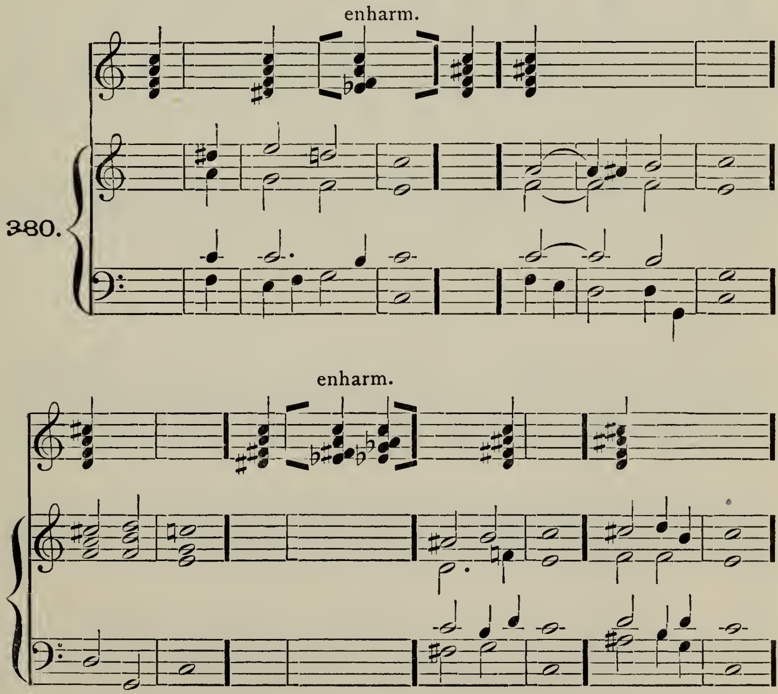
379.

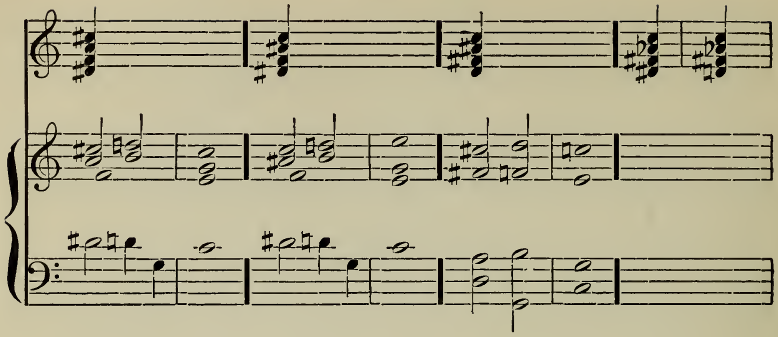


In all these progressions of the triad on the 2nd degree, its root *D* takes the cadence-like skip *D*– *G* whenever it lies in the bass, whether it appears as a natural tone or as one chromatically altered. Hence it is evident, that the progression is based on the natural laws for the connection of chords, even though the effect be sometimes strange and unexpected. Whether, and to what extent, such chord-forms can be employed in practice, depends primarily on their preparation and introduction.

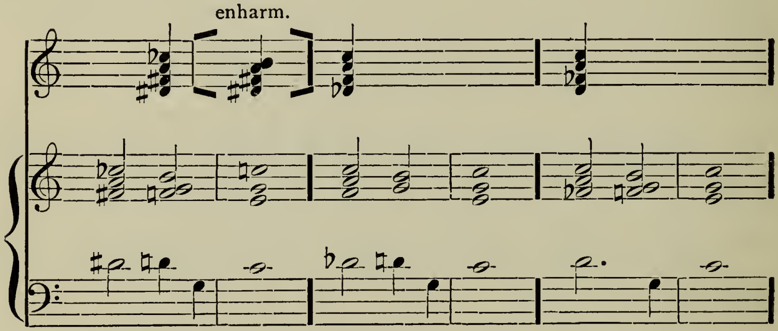
§69. As we know, the *seventh* in a chord effects the connection between two chords in a more definite and surer fashion, on account of its necessary resolution, than the *triad* can do in the same situation; because the latter (usually an independent chord) is by no means subject, in the same degree as the chord of the seventh, to the compulsion of further progression, which is in many cases fixed and predetermined. For this reason, too, the chord of the seventh on the 2nd degree is, even more than the triad on the same, peculiarly adapted for introducing the closing cadence, especially as the natural cadence-like resolution of this chord of the seventh forces it to resolve to the dominant chord; besides, it may easily be led to the chord of the sixth, or fourth and sixth, derived from the tonic triad. Below we give the chord of the seventh on the 2nd degree in its natural and in variously altered forms, and add, to render this point clearer, a few closing cadences beginning with this chord.

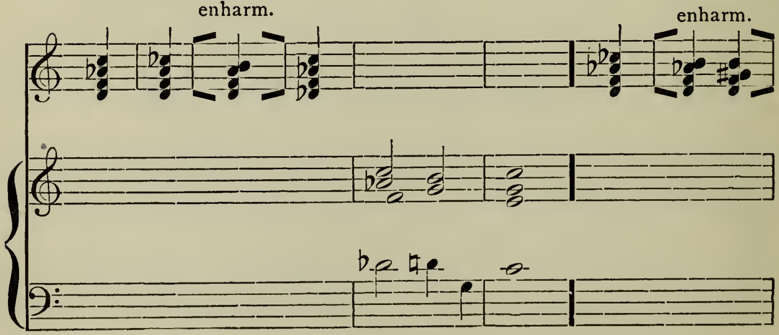
380.

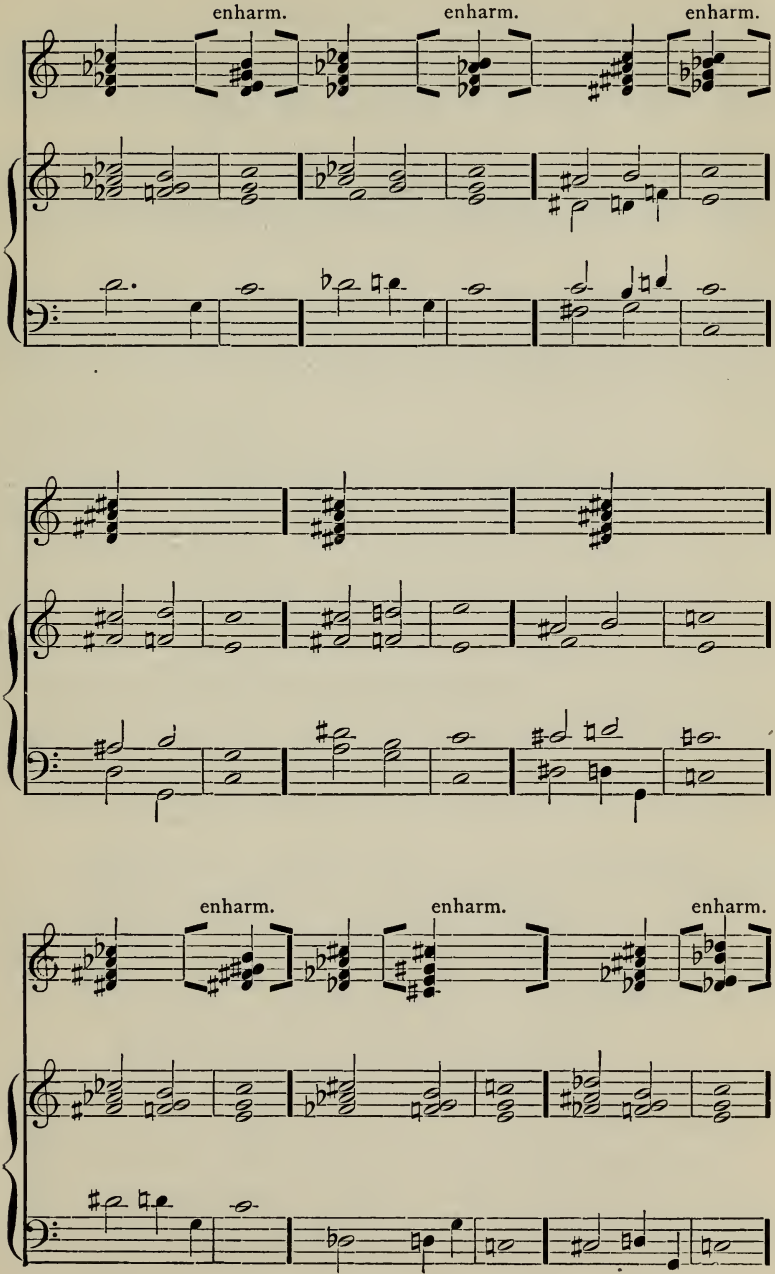


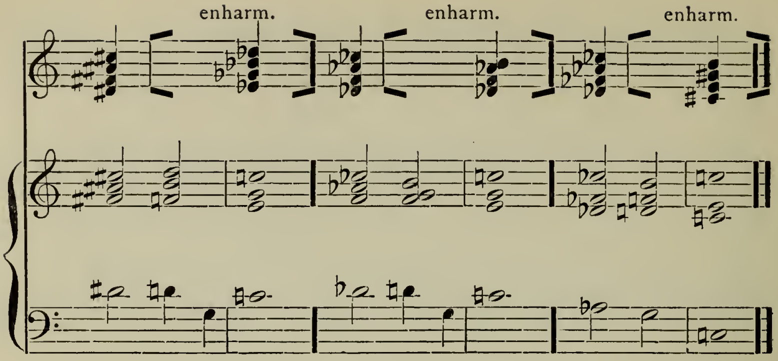


We take it for granted, that the pupil understands the enharmonic change in these forms, and their further progression to the cadence in *C*-major, and therefore omit their notation in detail both here and in other places.



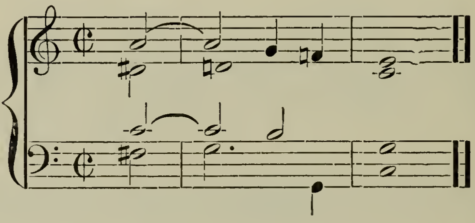



enharm.
enharm.
enharm.
enharm.
enharm.
enharm.



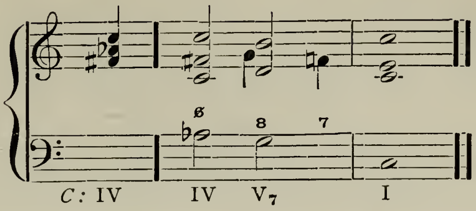
Even now we have not exhausted all the possible accidental chromatic alterations of the chord *D – F – A – C*. This would lead too far — further than necessary for our present purpose. In some cases the above chromatic alterations of this chord sound harsh, in others singular. But the pupil must consider, that, if even the not-altered chord of the seventh on the 2nd degree requires preparation on account of its dissonance, its preparation becomes far more necessary when one or more of its tones are chromatically altered. It must be properly prepared in every case; the mode of preparation must be left to the keen creative insight of the composer. It should also be considered, how greatly the harsh sound of many progressions can be softened by the employment of suspensions; e. g.

381.



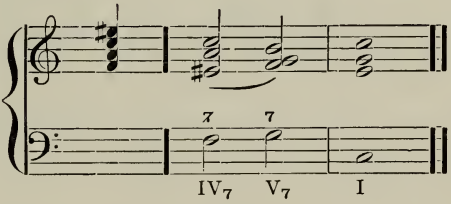
The chromatic alterations of the triad on the 4th degree may be passed over. The tones of this chord are the same as the 3 highest in the chord of the seventh on the 2nd degree. We shall merely call attention, in Ex. 382, to a form very frequently met with in the closing cadence under the name of the augmented chord of the sixth.

382.



§70. The chromatic alteration of the several tones of the chord of the seventh on the 4th degree will yield, with few exceptions, effects of sound with which we are already familiar (even if in other notation) in the case of the chord of the seventh on the 2nd degree. Other chord-forms, like

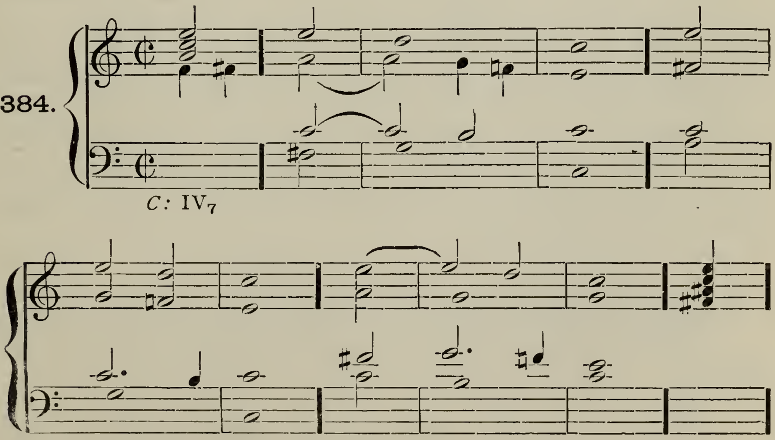
383.

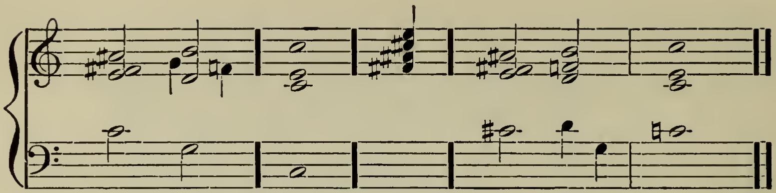


we set aside as idle speculative superfluities.

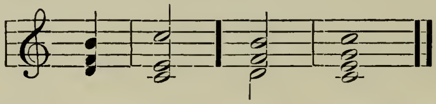
In any event, however, we shall obtain, by chromatically altering the tones of this chord, an abundance of new chord-forms suitable for cadence-building. Below we give a few examples of such formations.

384.



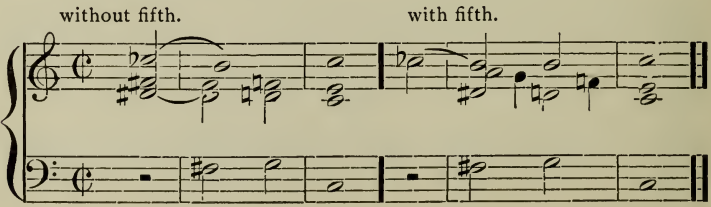


We leave it to others to experiment at pleasure with further changes of this chord. With a proper preparation of its dissonance it will likewise prove adapted for introducing the dominant chord (or the triad on the 1st degree as chord of the sixth or fourth and sixth, and thus for forming the close; though its true natural (cadence-like) resolution leads it to the chord on the 7th degree, not to that on the 5th. But just in this fact lies the reason of its usefulness in forming the closing cadence; for the triad on the 7th degree is simply a dominant chord of the seventh minus its root. This chord is employed often enough (e. g. in strict three-part writing) instead of the dominant chord of the seventh, especially as a chord of the sixth; and it is perfectly well adapted to take its place whenever it may become necessary to omit the root of the dominant chord of the seventh, whether from an insufficient number of parts (as in three-part composition), or from exigencies in their leading in four-part writing; e. g.



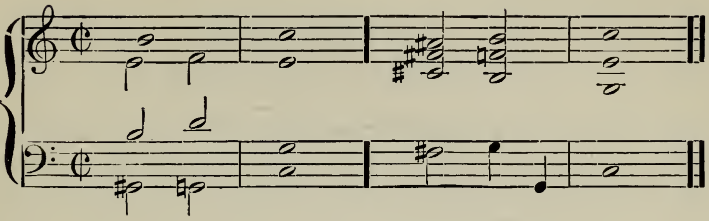
In the foregoing examples we have by no means exhausted the possibilities of chord-building, but they suffice to prove that a great number of apparently foreign chords, which appear in the closing cadence, are derivable from the chords on the 2nd and 4th degrees of the ruling key. Improbable as it may appear, the progression below at 385 is in reality founded upon this very chord of the seventh *D – F – A – C*, *A* being omitted, and the tones *D F C* chromatically altered to *D*♯, *F*♯, and *C*♭.

385.

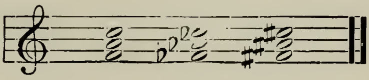


Forms of the cadence like the following

386.

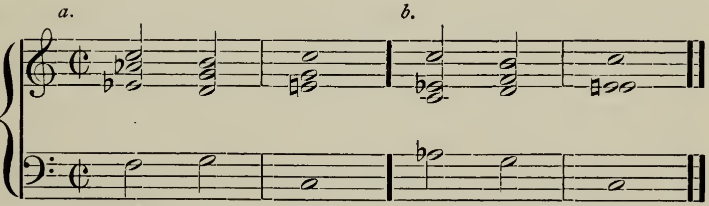


are likewise derivable from the chromatically altered triad on the 4th degree.



The cadence frequently met with

387.



is also derivable from the chord of the seventh on the 4th degree with flatted third and seventh (in the second ex. *b*, with omitted root). Such forms of chords may be employed, too, as a bridge for modulating from one foreign key to another; under certain conditions, the closing cadence alone may yield a sufficient modulation.

With this chapter closes the theory of the chords and their interconnection. The last chapters of this book contain, on the one hand, practical suggestions for the student, and are intended, on the other hand, to clarify and chasten his ideas concerning the true nature of musical art. May he take their contents to heart; for, in the end, a thoroughly practised ear and a true recognition of the aims of art will be his best instructors.

CHAPTER XXIII.

On the Musical Hearing.

Everyone hears music, and experiences its effect. With but few rare exceptions,* however, the capacity for hearing music corresponds, in general, to the impressionableness of the individual; and the greater or lesser intensity of the influence on various individuals of any composition which is developed at length, is primarily determined by the capacity of each to take the music in (by hearing). A short piece, such as a song, a dance, or a march, is easy to follow through its entire course; it therefore effects everyone, and becomes common property readily and rapidly. It is different in the case of larger and more complicated works, particularly instrumental compositions. These require, to be followed and grasped in and through their whole extent, a far more thoroughly trained and cultivated musical ear. But what is meant by a "musical ear," or "musical hearing?" Robert Schumann, in his "Musikalische Haus- und Lebensregeln" (Musical Maxims for Home and Life), describes the ideal hearer as follows: "Some one has said, that a thorough musician ought to be able to see an orchestral work heard for the first time, even a complicated one, as if the full score lay unrolled before him."

With this "ability to see as if in full score" Schumann means, that the listener should actually hear each and every tone precisely as it is written out in the score. In order to do this he must clearly and distinctly recognize each individual tone, and all possible combinations of tones both in melody and harmony, even in the boldest modulations. Further, he must be able instantly and accurately to recognize the timbre of each single orchestral instrument at any pitch and in any register, as well as all possible combinations of the diverse instrumental tones. "That is the highest faculty imaginable", says Schumann in closing his maxim; we say, "that is the ideal of a musical listener."

---

* One such exceptional case might be that of an excellent musician when listening to a trivial piece which makes little impression on him, or altogether displeases him; whereas the same composition may afford considerable enjoyment to a listener less qualified to judge. Or else when two listeners of equal capacity hear the piece while in quite different moods — the one healthy, fresh, and vigorous, the other wearied, suffering, and nervous — and thus, although equally matched in musical capacity, capable in different degrees of being stimulated to normal impressionableness.

Now, even if a given individual possess this capacity for hearing only in embryo, if he have but a certain *gift*, it can surely be cultivated and developed to an extremely high degree by perseverance and practice. Musical hearing does not begin, in our opinion, until this is accomplished; and even then the most practised listener, though he be a genius, will feel, after hearing a composition for the first time, especially in the case of really notable and original works, the necessity for an oft-repeated hearing, and this the more urgently, the greater the difficulties presented for grasping the work in its entirety by the novelty and originality of its contents. If unable to hear it frequently, he will endeavor to supply any missing links by a careful and thorough study of the score, and thus at length to obtain a satisfactory impression of the work.

One must not think, however, that this result can be attained, on hearing a work for the first time, by following the score with the eye during the performance. We consider the fashion recently come into vogue, of reading the score during musical performances, to be sheer nonsense as cultivated by students of music, and by certain dilettanti and musical professionals. For, when such persons are confronted by a new and entirely unfamiliar work, the simultaneous activity of eye and ear will cause mutual disturbance. While the eye follows the score, the ear cannot yield itself up wholly and unreservedly to the impression of the music, nor can the eye be quite untrammeled while the hearing is engaged. For this the routine of an able conductor is requisite, and even he would seldom enough place himself in the predicament of having to conduct *prima vista* a totally unfamiliar orchestral composition.

Only once contemplate these disciples of art, turning over with anxious solicitude the octavo leaflets of their orchestra-score amid the onward sweep of an *allegro* movement, and judge what may be the kind and degree of the impression obtained, from this first hearing and reading, through such musical tasking of both faculties. And even assuming that the listening reader is partially or thoroughly familiar with the composition in question, we ask: Of what assistance is it in enhancing the impression, to divide one's attention between the cold, dead signs of sound, the black note-heads, and the living, resounding tones? What should we think of a man who, during a representation of "Wallenstein" or "Egmont" in the theatre, should keep his eyes fastened on his volume of Schiller or Goethe? And considering it from the practical, instructive side, we perceive quite as little advantage in following the score. First hearing, then reading, then hearing again, is the best lesson for the pupil in instrumentation. After the performance or, for expert readers, even before a first hearing, a careful study of the score is certainly to be recommended to every conscientious musician; but glancing at or following the score during the performance can be of utility only to the conductor of the latter, for the purpose of setting the tempi, indicating the entrance of individual instruments or voices, and guiding the performance in general. Still, in this case, too, a following of the score becomes less and less necessary, the more the conductor becomes the master of the situation, and the more he grasps and assimilates the work in hand in its minutest details; a conductor whose eye is anxiously fastened throughout on the open score, himself bears witness to the fact that he has not fully grasped the composition to be performed.

Decidedly as we dissuade the student from reading music while listening to it, just so decidedly do we advise him to read music while *not* listening to it. "Reading music" means, conceiving written signs as sounding tones. This faculty will grow in like ratio with the capacity for "hearing musically." It enables one who possesses it in a highly developed degree to obtain a more or less clear insight, according to the degree of his capacity and practice, into musical compositions which he has no opportunity of hearing. For analysis, and the accurate recognition of all details when studying the masterworks of musical art, the attentive and intelligent perusal of familiar or unfamiliar compositions will also be of great service, *either before or after hearing them.*

We can now touch on another point in musical hearing: *Concentration* in hearing, i. e. in following a composition of some length. We assuredly do not go too far in asserting, that the great majority of hearers of music are actually incapable of following, in its entire extent, one of the larger and more complicated instrumental compositions while listening to it, especially for the first time;—of grasping it as a whole and in detail, and obtaining a correct total impression of the work. But we shall go still further with the assertion, that even after repeated performances of the same music the ordinary hearer seldom becomes thoroughly acquainted with it. He has grasped larger or smaller fractions of the whole, but for all that he does not yet know the work in its totality from the first tone to the last. And even when the hearer has succeeded in comprehending the entire scope of a symphony movement, or a symphony, or an extended work of chamber-music, either by frequent and attentive hearing, or by studying it in the score or by the aid of a pianoforte arrangement, it is by no means sure that he is really capable of hearing the whole in uninterrupted succession. But in this case a slight break in listening, or a brief interval of inattention, is much less likely to bring material loss, or to be of real disadvantage to his conception of the whole, precisely because he has already made himself familiar with the entire contents of the work. He can again quickly seize the thread of the musical narrative (if we may be allowed to use this expression for want of a better), and can supply the brief hiatus from memory, as he knows not only the "plot of the piece," but also all its details, from previous study. We must likewise mention the manifold trifling disturbances which discompose, during a concert, the listening attitude of even the conscientious auditor, because of his inability to defend his ear against other impressions while the music is performing. A sudden cough from his neighbor, the slightest audible accident, may distract his attention, though but for an instant.

Thus, in order to follow a long composition quite without interruption, it is an essential condition that we should as far as possible put away and exclude from our consciousness all other impressions. No other mental effort requires an equally high degree of vigilant and unceasing attention, such utter self-sinking and self-forgetfulness, so complete self-abandonment to a definite conception within a given and strictly limited space of time, as that called for during the performance of a musical movement. For the performance itself can no more be interrupted without destroying its effect as a whole, than can the listener rest from listening, or cease to give attention, without losing the total impression of the work. A musical work never confronts the hearer all at once, in its totality; it unrolls itself before him, and he must himself construct it out of the ever-gliding stream of atoms, and bind them together by an effort of memory, in order that the picture of the composer's fancy, gradually assuming shape by dint of the listener's unremitting endeavor, may affect him in turn. While the diligent and intelligent reader may turn over in mind the lofty thoughts of a Plato, Spinoza, Leibnitz, Kant, or Schopenhauer at fullest leisure and with his own mental equipment, and while it rarely or never happens that our time for studying and taking in any other work of art is limited to a comparatively very brief span, the hearer must take in and be affected by the composer's work within and at a given moment.

Any other art-work of architecture, sculpture, or painting presents itself complete and finished to the beholder, affording him not only the advantage of a first grand total impression, but also permitting a leisurely examination of all details for the enhancement of the total impression already acquired. Poetical works afford the reader at least this last-named advantage, even if they cannot be surveyed at a glance, as a whole, from the very beginning. Only the professional musician enjoys a similiar advantage in respect to the creations of musical art, being able to prepare for hearing an orchestral work by previous study of the score, or to supply, by subsequent reading of the latter, whatever was not wholly grasped during the performance.

We must still more strongly emphasize the distinction, that all the works of other arts borrow their ideas from life, from Nature; they all possess a subject-matter which is either an idealized reproduction of actual occurrences or an idealized imitation of Nature. Works of absolute instrumental music have no such subject-matter. We must characterize any attempt to foist upon or attribute to them such a subject-matter as a misconception, degradation, and ignoring of the innermost essence of music. Pure instrumental music has no meaning but a purely musical one, and can be grasped by no faculty but that of musical impressionability and sensibility, which faculty is necessarily preceded by the capacity of "hearing musically."*

Now, if absolute instrumental music is nevertheless capable of producing an effect, and in many cases even an extraordinary effect, on very many persons who are certainly incapable of "hearing" in our sense, we must carefully distinguish, whether this effect is brought about by a partial or full apprehension of the artistic intention of a composition, or is produced by some ulterior cause. This latter we should term the elementary characteristic of music, its sound and rhythm. Many persons may partially grasp the intention of a composition, for the reason that the prominent themes, and isolated characteristic traits of a movement, make an impression on the hearer, and isolated melodic phrases affect him by their charm or even impress themselves on his memory, frequently enough, whereby his dim conception of the whole is illuminated, so to speak, in places. But for the musical hearer the details of a composition become the more effective, the more clearly the necessary relation of each part to the whole is recognized; indeed, it often happens that some detail is first rendered intelligible by subsequent features, and *vice versâ*. It follows, that we can never find the essential intention of a composition in one single feature, even though it be styled the principal theme, or the fundamental idea. Just in our chiefest master-works, in the grandest revelations of Haydn, Mozart, Beethoven, Cherubini, and others, these principal themes are often astonishingly simple, and betray, considered by themselves, nothing whatever of the form afterwards assumed by the whole piece. This is not at all due to the peculiar fruitfulness of these themes, as if such later development naturally and necessarily resided in them, but simply and solely to the teeming imagination which is able to build up marvelous works out of the very simplest materials. In the case of other and humbler composers we often meet, on the other hand, with beautiful, original, and charming themes, without feeling satisfied with the work or movement as a whole; simply because the mutual relations of the details of the work are not satisfactory to us.

---

*We have intentionally spoken of nothing but absolute instrumental music, because in case of the co-operation of music with other arts, especially with poetry (to which we reckon not only vocal music in the opera, church-music, songs, etc., but also, in a certain sense, the so-called program-music), a wholly and undividedly musical impression can no longer be counted on. For in this case other factors are intended to influence the hearer in a greater or lesser degree.

But, apart from the indefinable charm of certain melodies,—which, however, frequently loses its spell and vanishes in the course of time—the elementary characteristics of music, as which we mentioned sound and rhythm, will always suffice by and in themselves to produce a very marked impression. Anyone, whether a musician or not, and even some of the lower animals, can feel this most primitive of all musical effects, and even a single tone or a few chords, to which assuredly no musical idea can be attributed, may call forth a great effect under certain conditions by inducing a mood. But every composition contains a great number of details calculated to induce moods, these details being primarily, to be sure, the material for the representation of the musical subject-matter. By and in themselves, too, such details affect the non-musical hearer; they affect him each by itself, and awaken moods in him; not seldom, indeed, they give rise in his fancy to entirely unmusical pictures and conceptions, causing his imagination to stray in fields far remote from the real musical intention and content of the composition to which he is listening; — and he fancies that he has experienced true and deep musical emotion if he has — intentionally or otherwise — "thought" on anything during the music. Such hearers, and they unhappily form the great majority, always remain in the vestibule only of the temple of Music. Others succeed in finding their way, step by step, into its sublime interior; few indeed are permitted to enter the holiest of holies in musical art, and, by attaining a comprehension of the innermost essence of music, to discover all its treasures, and enjoy unalloyed delight in their marvelous abundance.

CHAPTER XXIV.

Subject-matter and Form.

It was long before the fact was fully recognized, that the subject-matter, the intellectual substratum, of instrumental art-works in music has no prototype in Nature; that music, unlike the other arts, does not borrow the ideas for its creations from Nature or life,— that it is, as it were, "a pure, unmaterial, self-subsisting spirit-world, apart from all that is of the earth earthly, and independent of the imitation or repetition of any conception derived from the things of earth." In their sonatas, quartets, and symphonies Haydn, Mozart, and Beethoven created instrumental music. Before these glorious revelations of the inmost essence of musical art, the astounded world bent in deep emotion. In these works were seen, for the first time, musical creations of a pattern and style quite emancipated from the rigid conventional types exemplified in the opera librettos and church-music texts till then in vogue, and of the grandest and most pregnant forms and development. Music was no longer the companion, the handmaid, of Poetry; she now appeared in her full majesty as an absolute and independent sovereign. No one was able to discover how it could be, that this same pure instrumental music so mightily stirred our inmost being, that we all instantly understood its language, comprehended it so fully and perfectly, and were none the less obliged to abandon all attempts looking towards an abstract apprehension of this immediate understanding. Everyone sought the charmed *word*, the "open, sesame!" of the problem; — the *poetical* content of the music. No one would admit that such content might be superfluous; its denial was even held to degrade musical art. But in the course of time it was inevitable that the idea of a conceptional intent or content should be given up, and that the subject-matter of a composition should be sought throughout the same only in its musical construction, in its groups, periods, and successions of tones. The gifted thinker, Arthur Schopenhauer, was the first to promulgate this notion in his noble work: "Die Welt als Wille und Vorstellung," (The World as Will and Idea), Ch. 39, "Zur Metaphysik Der Musik" (On the Metaphysics of Music). But Schopenhauer's works long remained unnoticed, and not until much later was the same conclusion arrived at by Lazarus, in his "Leben der Seele," (Life of the Soul), and Hanslick (still later) in his essay "Vom Musikalisch-Schönen," (On the Beautiful in Music). Schopenhauer's remarks, penned in 1819, are so plain and pertinent that we cannot refrain from quoting them here. The passage in question reads: "On casting a glance at pure instrumental music, a Beethoven symphony exhibits the utmost confusion, which is nevertheless founded on the most perfect order,— the most violent conflict, which changes in a moment to the fairest harmony; it is *rerum concordia discors*, a true and complete image of the world, which rolls onward, sustaining innumerable forms of being in an immeasurable entanglement, and sustaining itself by incessant destruction. But this symphony expresses, at the same time, all human passions and emotions,—joy, sadness, love, hate, fear, hope, etc., in countless nuances, yet all merely *in abstracto*, so to speak, and quite without individualization; it is their mere form without substance, like a spirit-world without matter. True, we are inclined to materialize them when hearing them, to clothe them in imagination with living frames, and to fancy them in all manner of scenes proper to life and nature. On the whole, however, this promotes neither our comprehension nor our enjoyment of them, but only furnishes them with strange and arbitrary attributes; therefore it is better to conceive them as they are, without such mediation."

These remarks give, as far as mere words can do it, a most pointed and distinctive characterization of the nature of instrumental music. That it is not an entirely exhaustive one, resides in the incomprehensibleness and inexplicability of music itself, and likewise in the circumstance, that language does not afford words fully expressing many of our sensations and emotions. This difficulty becomes strikingly apparent whenever we attempt to talk about a given piece of music. We feel immediately that we are unable to describe it in words. Now, in order to give at least an approximate idea of a piece of music, the professional language of art has gradually adopted numerous terms for the designation of certain passages and parts of a composition. Thus "Subject-matter and Form" are two technical terms which we continually meet with now-a-days in musical reviews. The latter use them to designate the structure of the several movements of a work, what might be called its architectonic unity, in contrast to the stimulating and exciting power exercised, in a greater or lesser degree, over the listener by the separate passages, whether these passages are already contained in the themes of the composition or are built up and developed out of them. We have grown accustomed to accepting the terms "subject-matter and form" solely in this sense, and thus they serve both the teacher and the musical reporter as a makeshift in the critical analysis of a piece of music. Still, on examining the matter with closer attention, the question first forces itself upon us: "Can the 'form' and the 'subject-matter' of music really be distinguished in this manner, and can we conceive them, let us say, as something *external* and *internal?* The answer will of course be in the negative. Both naturally belong together; for how and where can form and subject-matter be separated, — what makes the subject-matter, what is the form,— is the subject-matter not itself the form or, reversely, is the form not itself the subject-matter?

We can hardly hope to find an answer going to the root of the difficulty; in truth, the innermost essence of music is an inscrutable mystery, and our present purpose is simply to explain, that the conceptions 'form' and 'subject-matter' in music must not be taken as things outside of and beside each other. On the contrary, they are so closely united that their boundary can nowhere and never be pointed out. If we seek, to begin with, for the subject-matter of a composition, we can in no case find its spiritual essence in any single detail of the whole, neither in the first or second theme of a movement, nor in any other specially prominent and markedly effective passage. In proof of this assertion we adduce the fact, that the themes of our most eminent composers, examined quite by themselves, are in many cases by no means so precious material as is generally assumed. Take, for instance, the principal theme in the first movement of Beethoven's *A*-major symphony. It begins on the *auftakt* in the fourth measure of the "Vivace," and ends with the twelfth measure. Out of these eight measures the entire movement is developed, which, like the whole symphony, is one of the most marvelous and perfect works of musical art. But in and by themselves, these eight measures contain nothing marvelous whatever, or anything in the remotest degree suggesting the beauties to follow. They in no wise justify particularly high expectations, and the whole very simple melody, which does not overstep the compass of a seventh, bears the harmless, innocent character of a pastoral idyl (especially in its instrumentation with soft wood-wind instruments, two horns providing a bass, and only the rhythm supported by the strings) ; it does not afford the slightest indication of the grandeur and magnificence of the coming movement. We might bring forward very many such instances ; but prefer not to become diffuse, and can safely leave to the sound judgment of our readers the answer to the question : Whether, in point of fact, the first theme in the Allegro of Beethoven's " Leonore " overture, or those of the Eroica and the *B*♭ symphony, or of a very considerable number of the most glorious creations of musical art, are materially different, in respect to their intellectual content, from the themes of humbler works. We by no means ignore the fact, that in many cases the first theme, or the very first motive of a composition, may awaken very special interest ; but we are the less able to attribute peculiar significance to this circumstance for the reason that, on the one hand, we have seen the grandest masterworks arise from the humblest beginnings, and on the other, that a fine beginning or a most charming principal theme, and even many extremely interesting details, may be found in a movement, without its impressing us on the whole as a finished work of art, and without causing us to speak of such a composition as if it were an eminent work of genius, or attributing to it peculiar depth of musical meaning on account of its beautiful details. We only need call attention to certain of Chopin's compositions. No one will dispute the beauty of the themes of the opening movement in the *E*-minor concerto ; yet scarcely one musician of even average refinement of taste could be found, who would approve of the movement as a whole. In it everything which we understand under musical symmetry, structural development, the design, outline, architectonic unity — whatever one may choose to call it — is turned fairly upside down; and while the entrance of the second principal theme for the first time in *E*-major has a singular effect, its later reappearance in *G*-major is positively distasteful, despite all the beauty of the theme itself.

Hence we may conclude, that the beauty of a musical composition is not by any means invariably and under all circumstances dependent on the beauty of its themes; but that, on the contrary, very many most valuable masterworks possess a thematic material of little interest. In passing we merely remind the reader of a great number of Haydn's quartets and symphonies, of the themes in Cherubini's overtures, of certain sonatas by Beethoven, and other classical compositions. Further, the conclusion that there resides, in these insignificant themes, an especially fruitful embryo, bearing in itself as it were the conditions of a grand development, would be quite wrong. We clearly see that such is not the case when two unequally gifted masters employ, accidentally or intentionally, one and the same motive, one and the same musical thought, as the fundamental idea of their composition. Mozart developed the Allegro of the overture to the Magic Flute from the same motive that Clementi used for the first movement of his *B*♭ sonata. But what a contrast between Mozart's sublime palace, and Clementi's well-built, yet commonplace dwelling-house! Hummel, in the last movement of his *F*-minor sonata, uses the same fugal theme out of which Mozart develops the grand fugue of his *C*-major symphony. The fact is simply, not that the master takes from the theme that which it contains, but that each fructifies the theme according to *his* individuality and the might of *his* imagination.

Thus the theme is by no means of such vital importance to the composition as to contain its intellectual content, so to speak, "*in nuce;*" still less can this intellectual content be contained in any other detail. On examining in detail the most effective features of a composition, and taking them out of all connection with the rest, we nearly always find that in and by themselves they contain nothing whatever remarkable or peculiar or extraordinary. Their significance resides wholly in their evolution out of what precedes and their connection with what follows. In its proper place, therefore, anything and everything will have its proper effect in a work of art, and a single tone sustained by one instrument may attain to equal importance with the most complicated contrapuntal combination,— the unison during a few progressions may be fully as moving as the prolonged swell of a melody with an elaborate harmonic foundation. It follows, that we shall find the essential intellectual content of a composition neither in one nor in several or many of its details; it must be sought only in the whole. But this Whole is termed, in common parlance, the Form of the composition; and this being so, form and subject-matter would again appear to be identical in musical art. They are proved, however, to be *not* identical by many works with whose musical structure we can find no fault, whose symmetry satisfies us, whose organic articulation and development leave nothing to be desired, and which nevertheless, despite their faultless musical construction, neither appeal to our emotions nor satisfy our sense of the beautiful. On hearing such a piece any intelligent musican will say, that it is extremely well put together, yet surprisingly tedious for all that. Here we see a finished artistic musical form, while the subject-matter cannot interest us in the least, or move or attract us — the diametrical opposite to the above-mentioned Chopin concerto. But it must not be assumed, that the composition in question consists merely of form without subject-matter; — its subject-matter is neither novel nor specially attractive to us; all that it can say to us has been better said before by others, consequently it makes no impression on us. Besides, in view of the wonderfully rapid progress of musical art, the musical subject-matter of a work may have been very attractive when it was written, yet thirty years later its charm has vanished. The ravages of time do not spare even works of decided eminence; only the creations of genius are for all time, and remain untouched by change. Such works are generally far in advance of contemporary understanding, being first appreciated by later generations, who must themselves learn to grasp these mighty creations by patient study of the same.

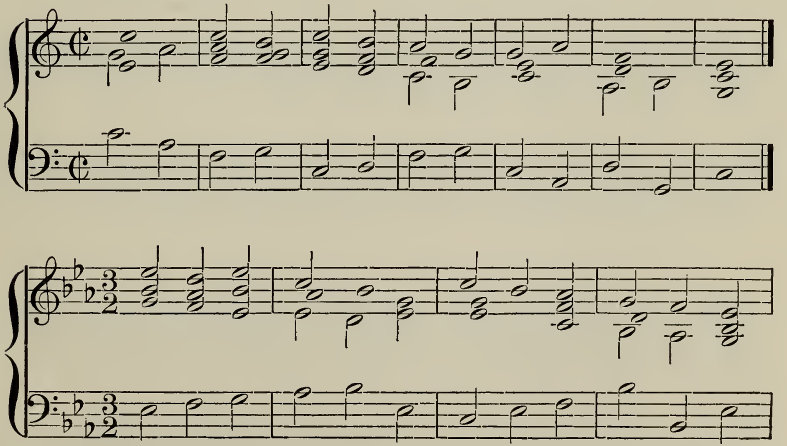
All that now remains to be done is, to assume that the intellectual content of a musical composition is something unknown, the effect of which we feel, though unable to grasp it as a concrete conception. Still, we may venture to speak of an intellectual — *nota bene*, *musically* intellectual — subject-matter of a composition, even if we cannot define it with words, or explain wherein it actually consists. The lasting effect of a composition on a musically educated listener is the best measure of its intellectual content. From the earliest times music has been called the language of the feelings, probably for the reason that our every-day speech, however highly developed it may be, has no words to express many feelings, and precisely the most delicate feelings and emotions. We may therefore be allowed to say, that we (instinctively) feel the musical content, idea, or thoughts of a work ; but just as we are quite unable to grasp this musical content as a concrete conception, so, also, is it totally impracticable to separate this content or subject-matter from its form, to extract it from its form and development like the kernel from a nutshell. It is simply impossible to conceive the musical subject-matter in its musical form like a body in a garment, a kernel within a nut, as a first essential in something less essential, as internality and externality. Both confront us firmly and inseparably united in essential co-development, the first arising with and from the second, issuing from it like the fragrance from the flower, like speech from the human mind, like the spiritual from the corporeal life. We feel the subject-matter in the form, we feel how the form is filled by the subject-matter, yet we cannot disunite them like wine from a glass. Nor can we say that this subject-matter takes on a peculiar form, for the nature of musical development remains in the main unchanged, in spite of numerous variations. Still less could it be said, that a subject-matter can be worked into a musical form. Just as any conception which is full of meaning and true to art is a spontaneous one, in the art of music, too, subject-matter and form spontaneously coalesce, and can therefore not be disunited. They belong to each other like the body and soul of man, they can exist and find expression only when united. Impossible as it would be to say where the dividing line is, in man, between body and soul, just so impossible will it always be for anyone to point out where, in a piece of music, the line of separation may be drawn between form and subject-matter, where their limits are, where the one begins and the other ends, wherein the soul and wherein the body of the musical organism consists. But here our comparison halts ; for Nature, throwing off wholesale products on a stupendous scale, often enough works very inartistically, and assigns a beautiful soul to a mean, ugly, or infirm body, whereas genius knows nothing of such natural accidents ; in the works of our sublime masters we never find a beautiful subject-matter in an insufficient form, but everything combined in most complete unity and perfect harmony.

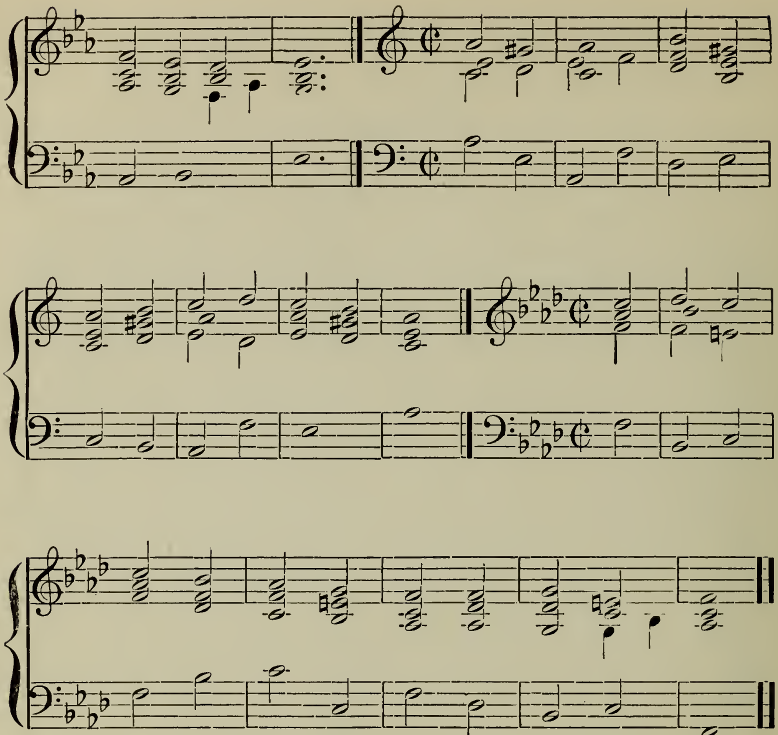
APPENDIX I.

The following examples, with references to the exercises contained in the body of this work, and worked out by the author, afford many suggestions for the solution of the exercises. It will be of great advantage to the pupil, before beginning to work out the exercises given in the several sections, to analyze carefully and in each case the examples given here bearing on the subject in hand. The thorough-bass notation, and also the degree-numbers for the chords and the course of the modulation, are to be filled in by the pupil in the space left above and below the bass staff; the examples written out in four clefs should be played through repeatedly. By this means the pupil will soon become thoroughly at home in this work. The examples being written with special reference to certain rules, they can of course lay no claim to real artistic merit; they are intended to serve only as a practical introduction, and to that extent form an important addition to this textbook.

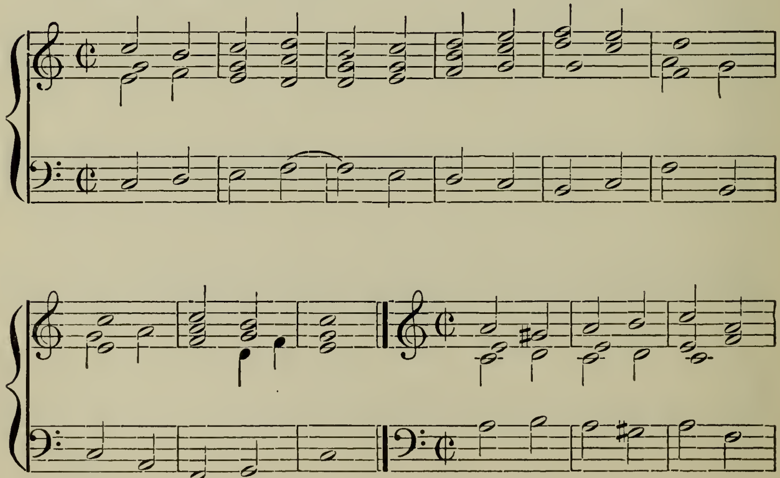
Examples.

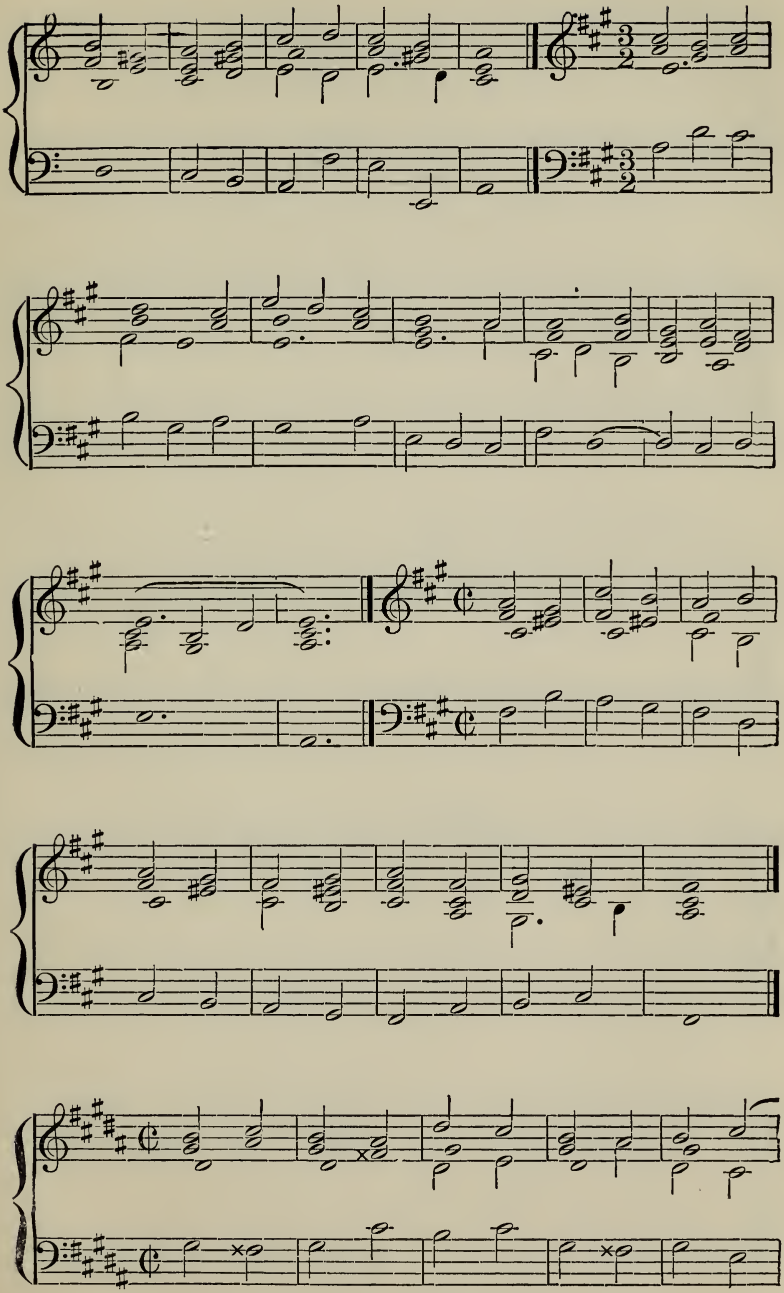
To Exercises No. 137, §37.

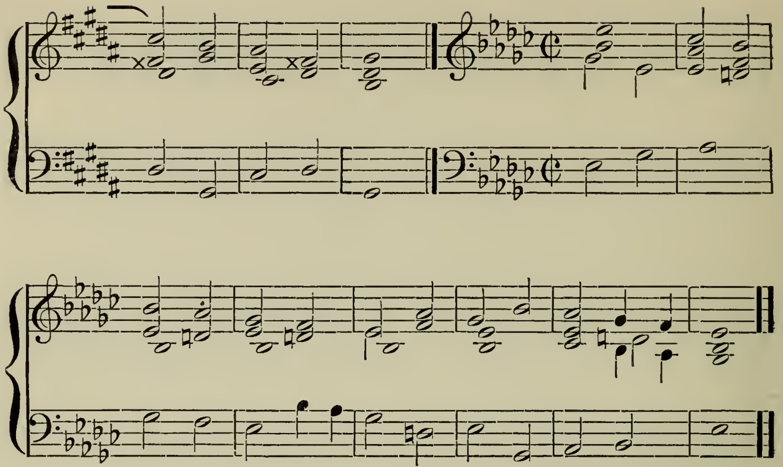




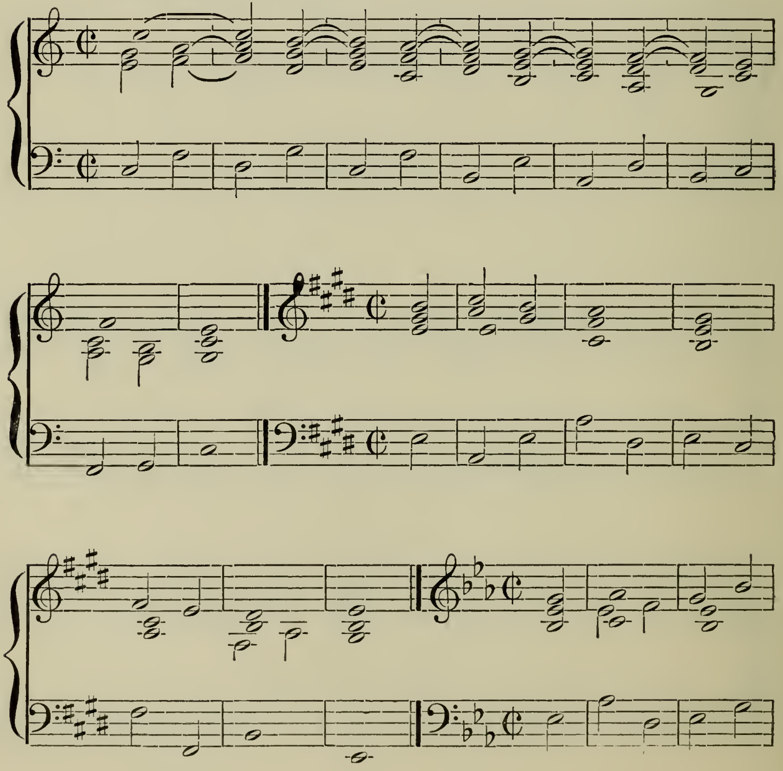
To Exercises No. 145, § 39.

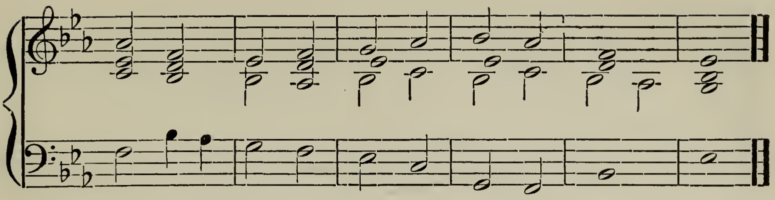




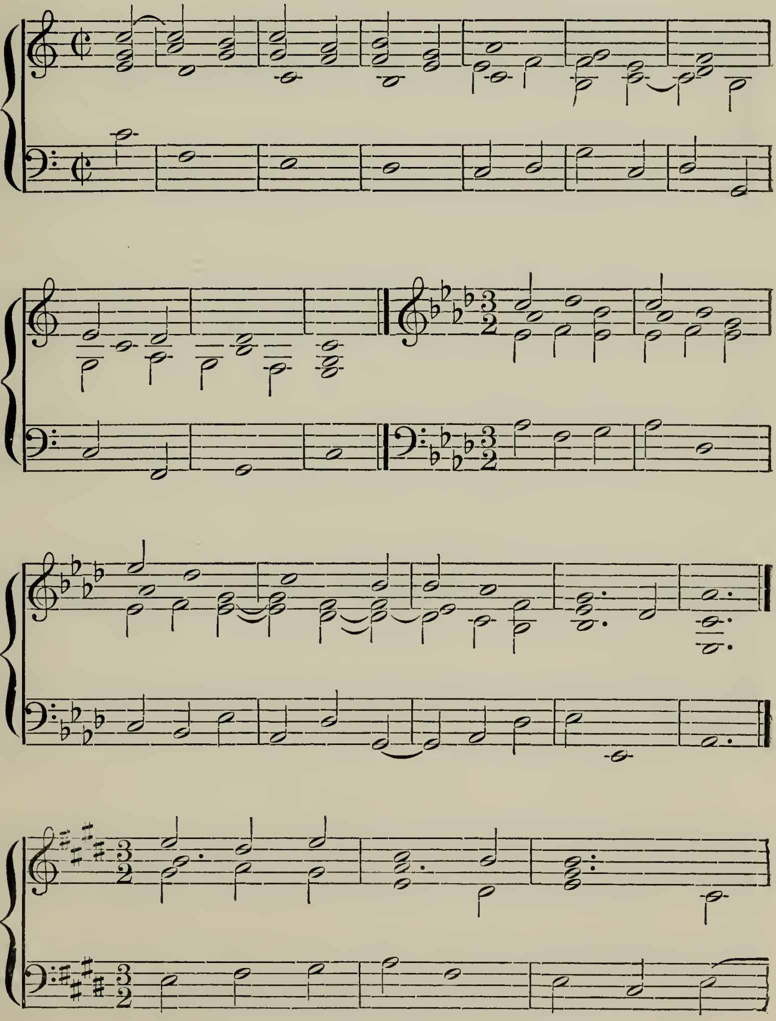


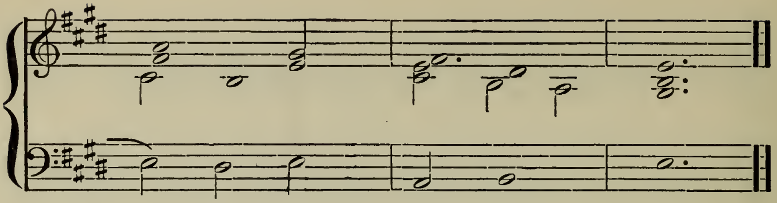
To Exercises No. 165, § 40.



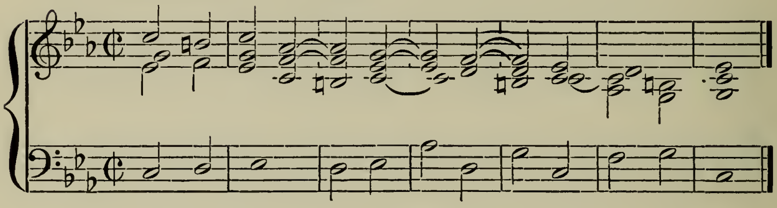


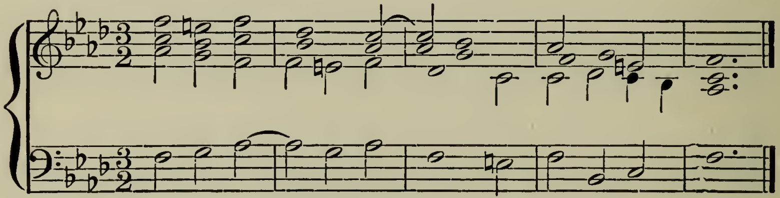
To Exercises No. 170, § 41.

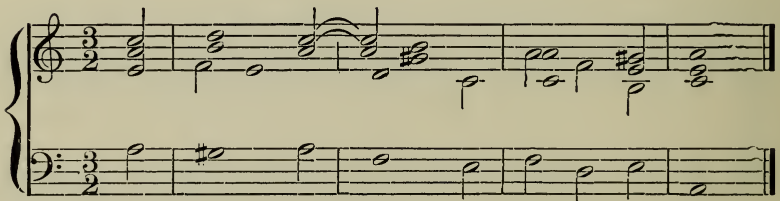


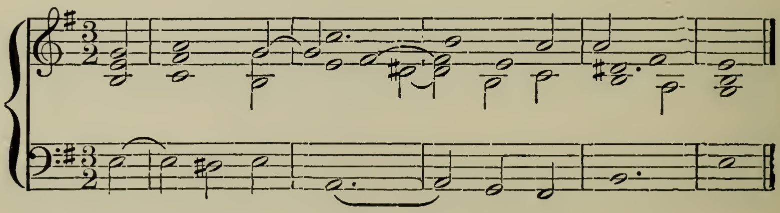


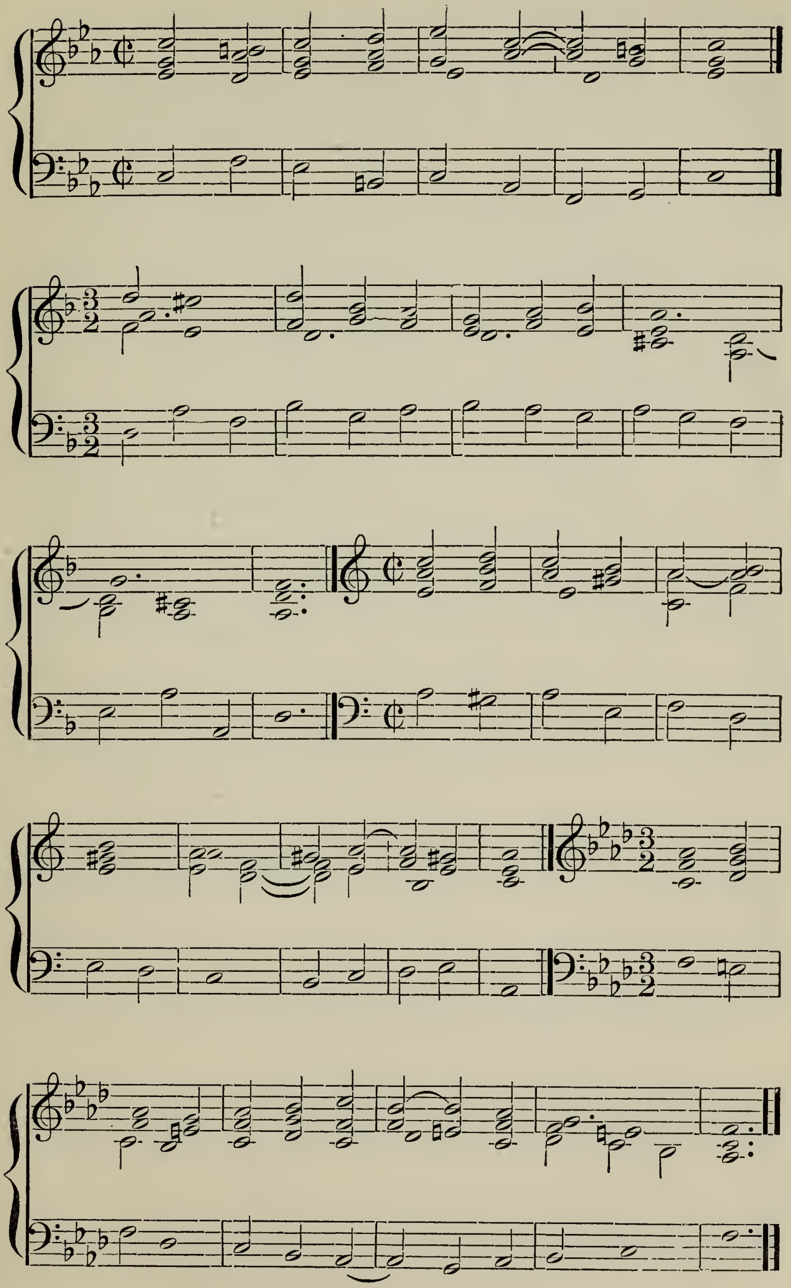
To Exercises No. 185, § 43.



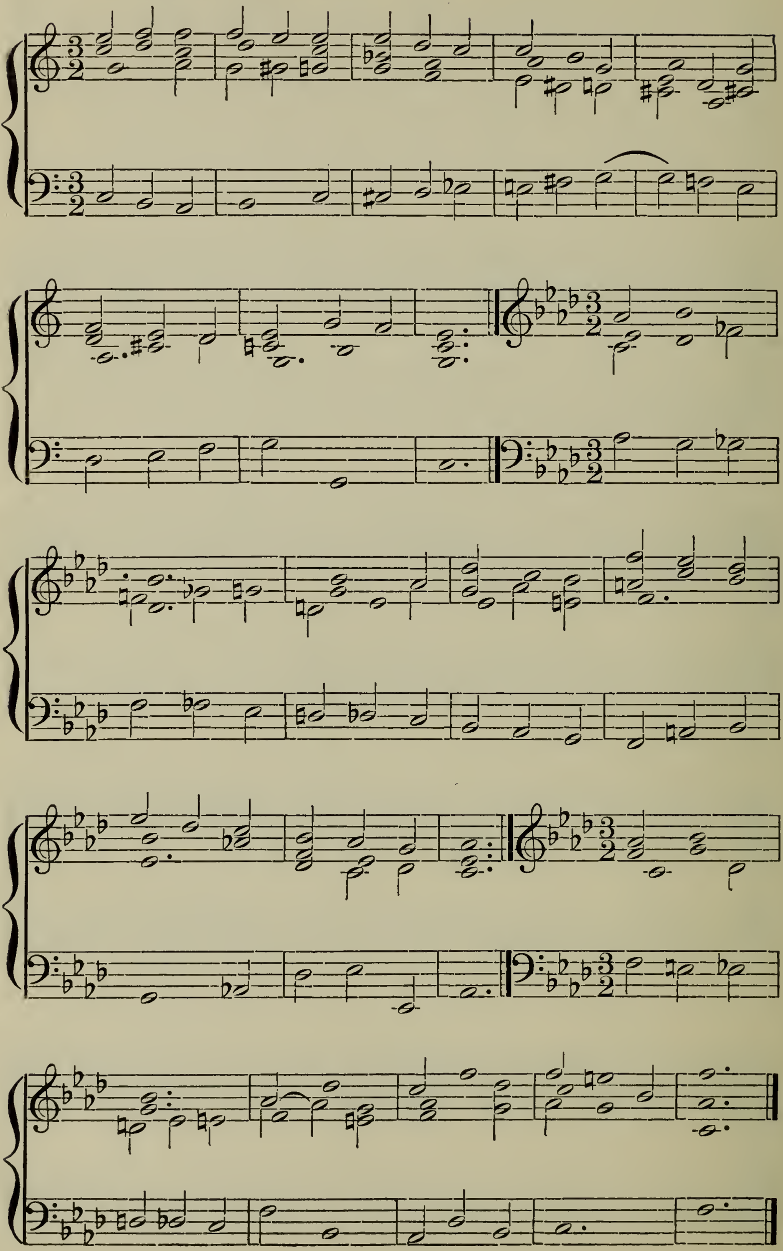


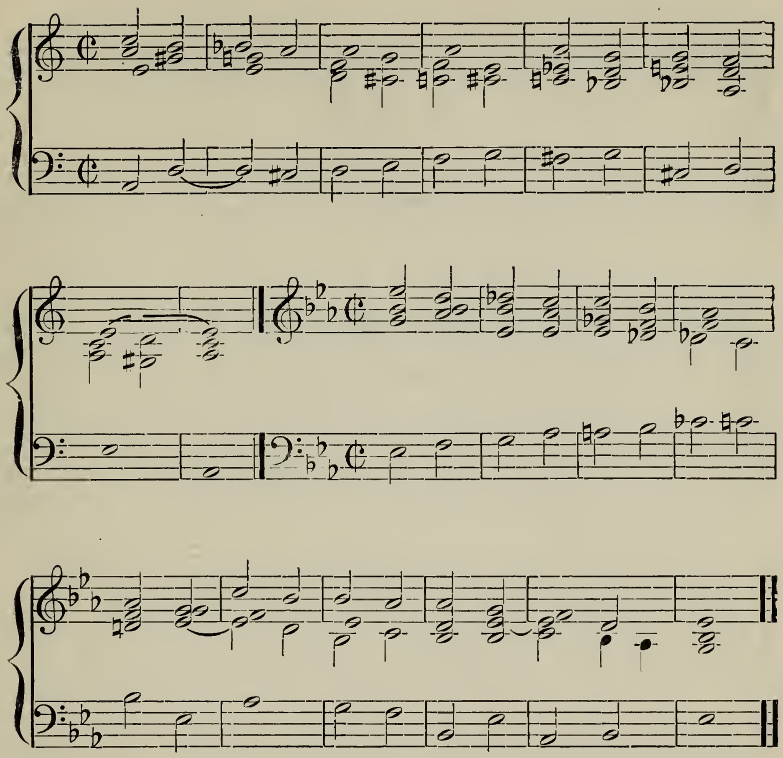




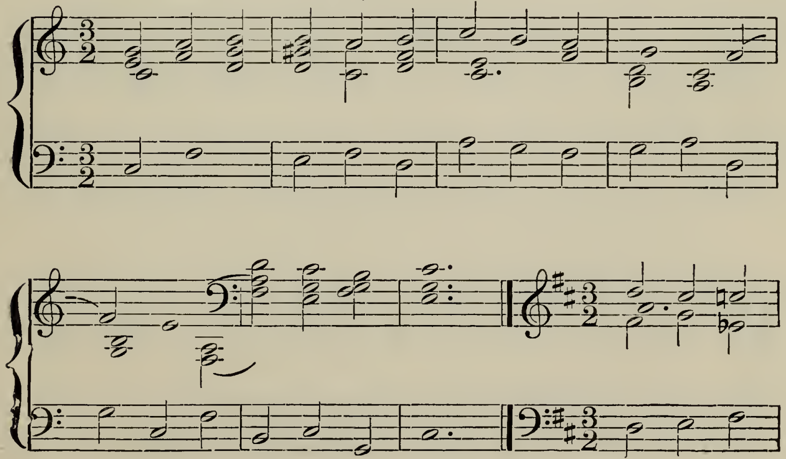


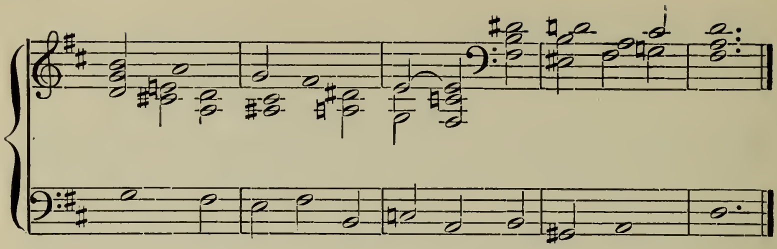
To Exercises No. 195, § 45.

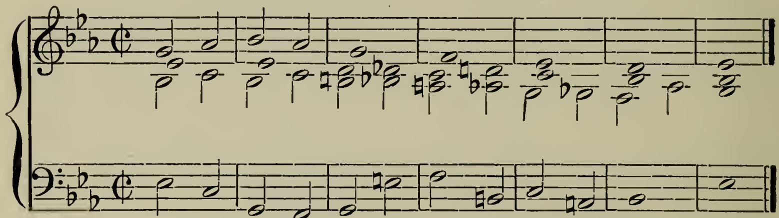


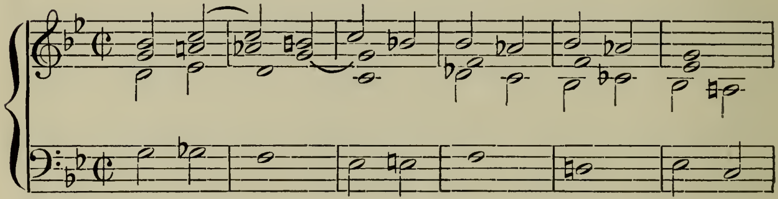


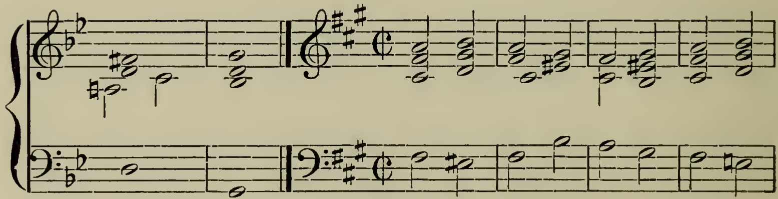
To Exercises No. 207, § 47.

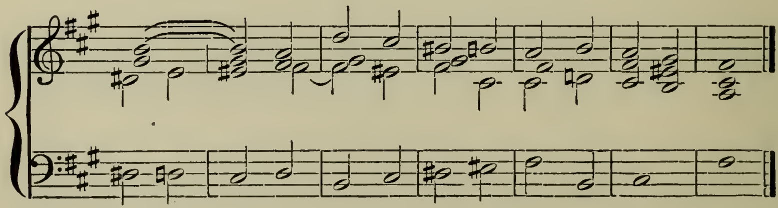


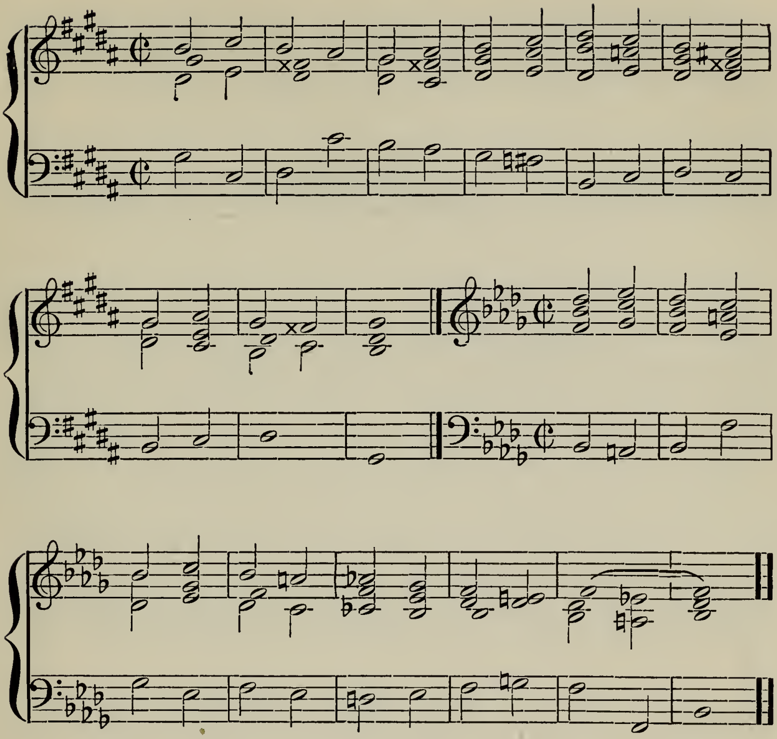




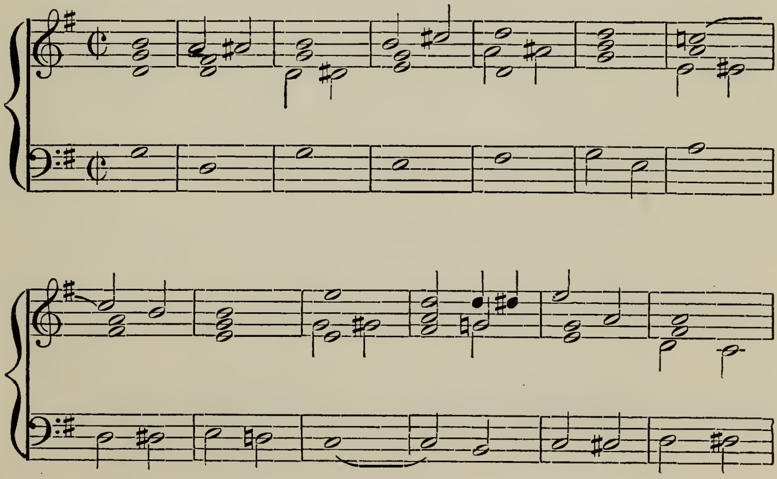


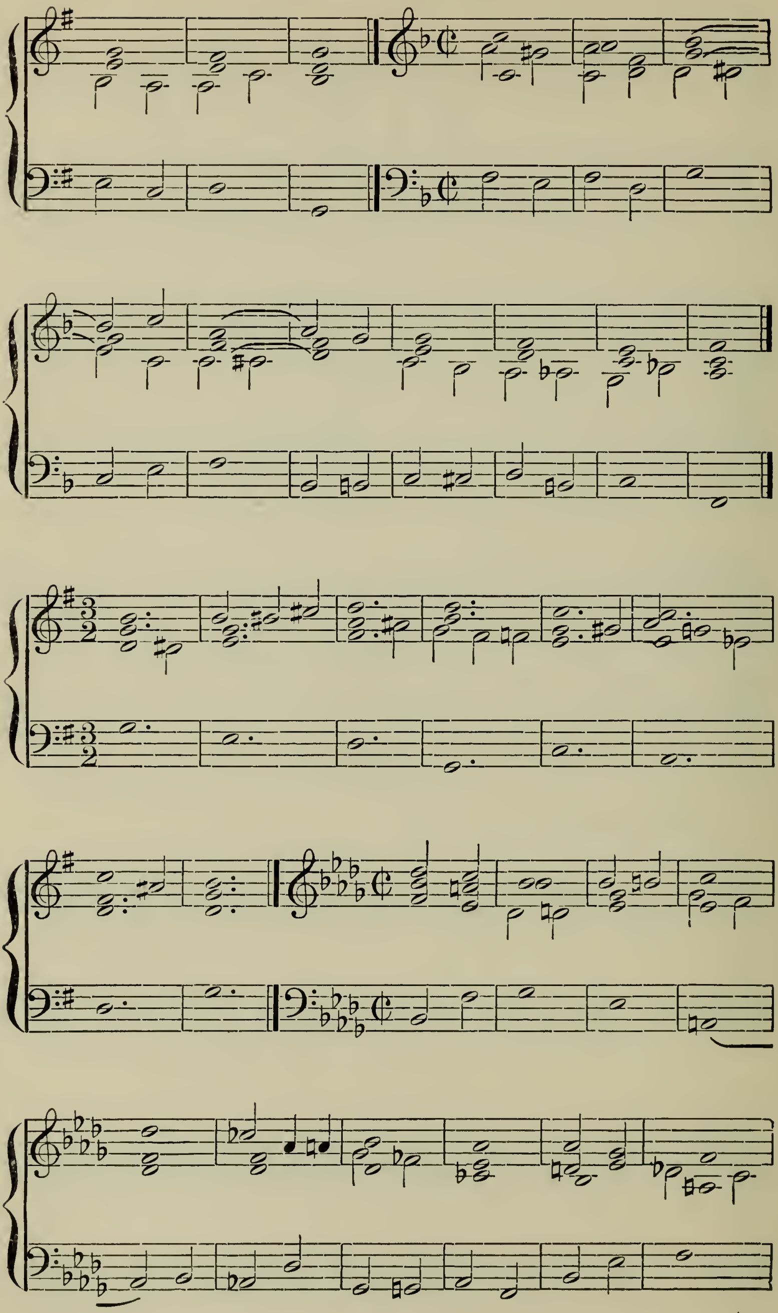


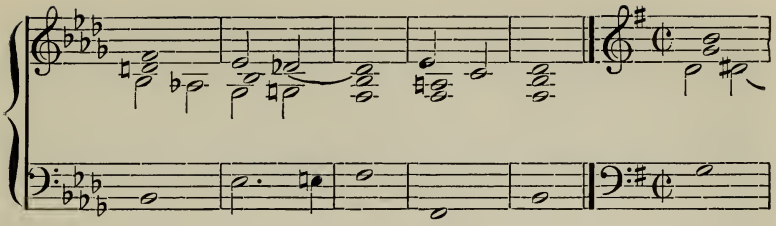


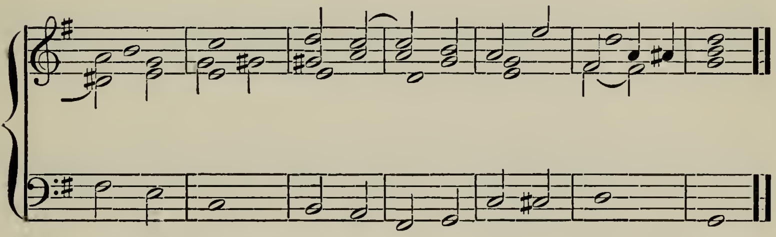


To Exercises No. 217, § 48.

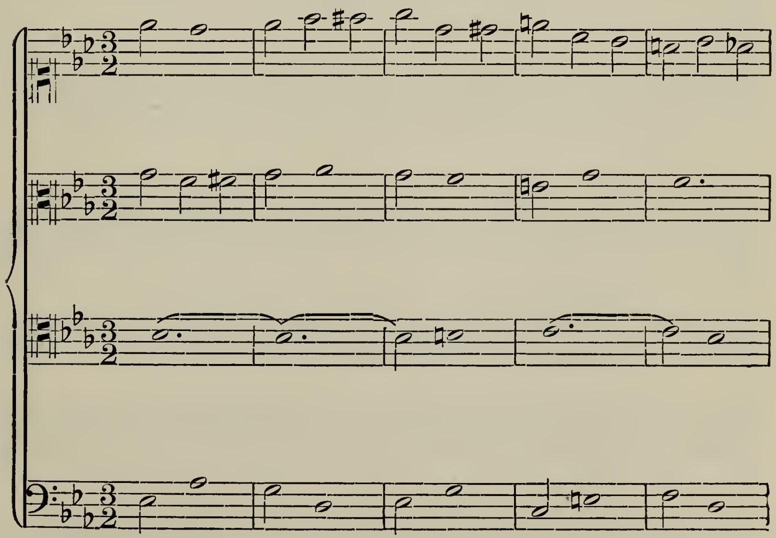


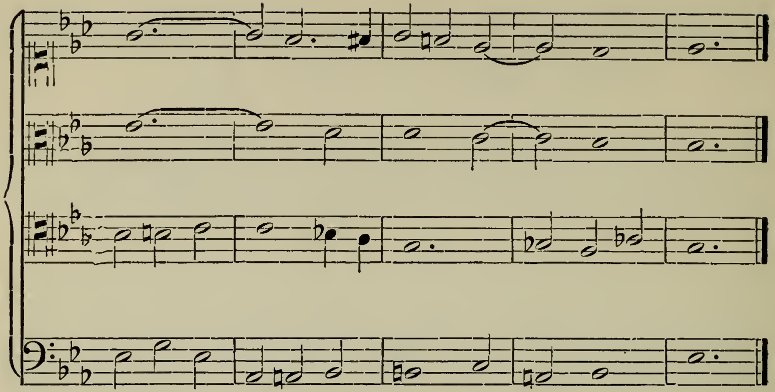


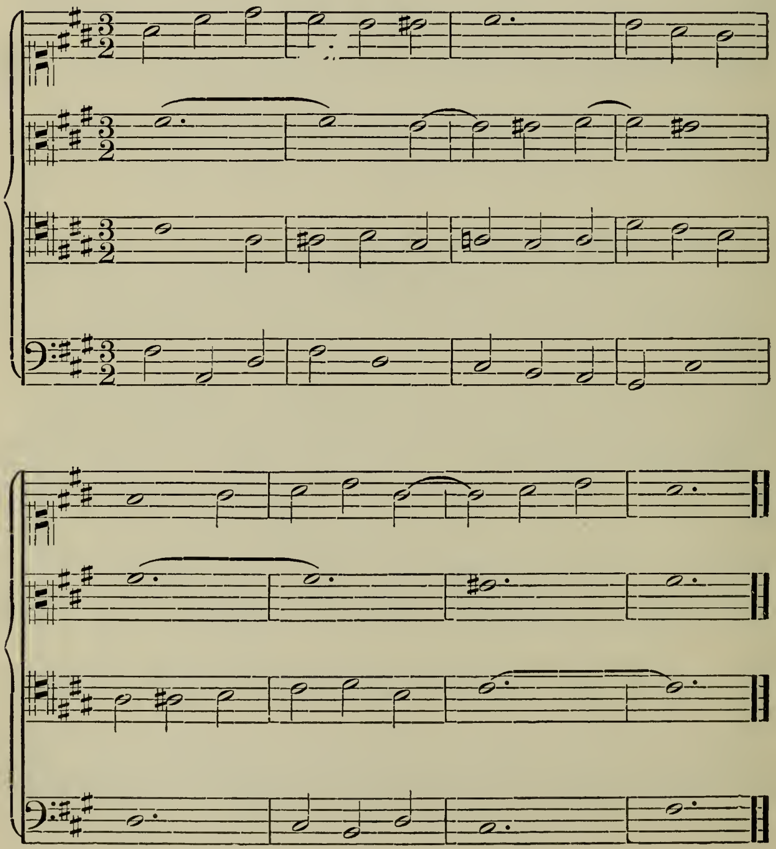




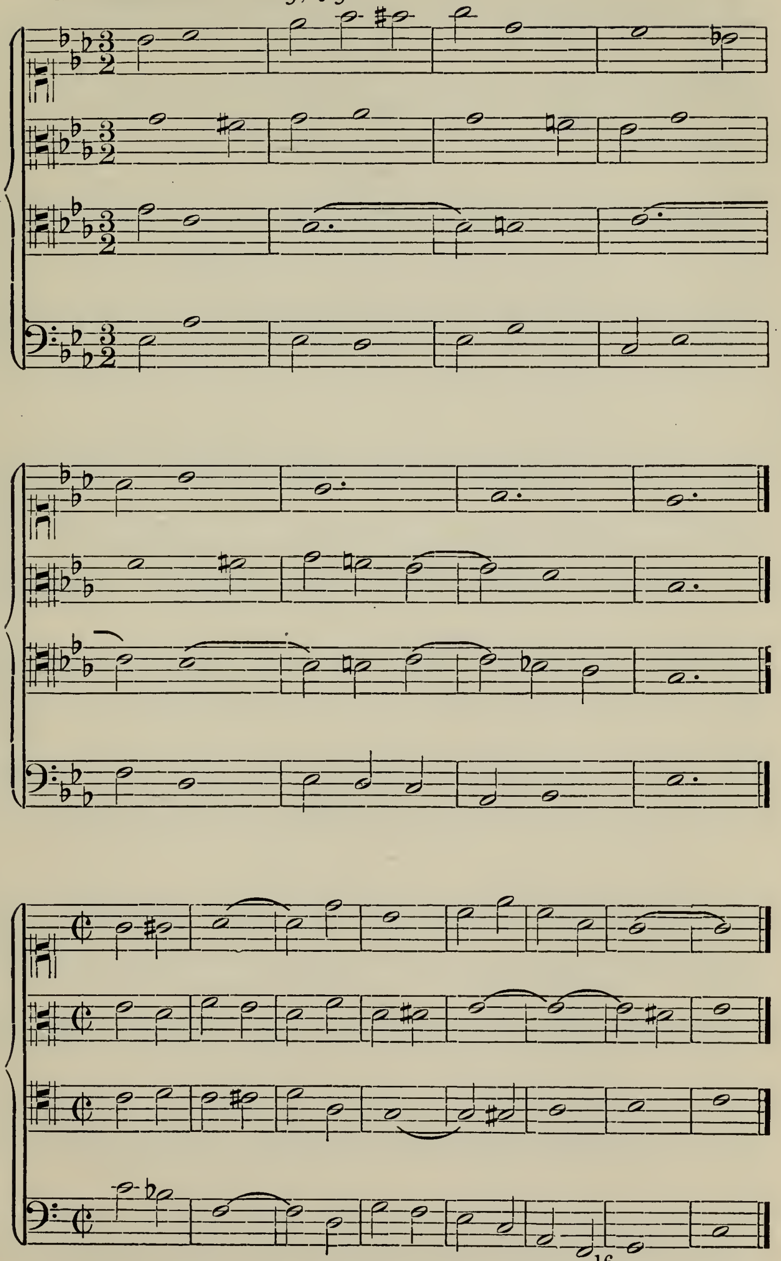
To Exercises No. 222, § 49.



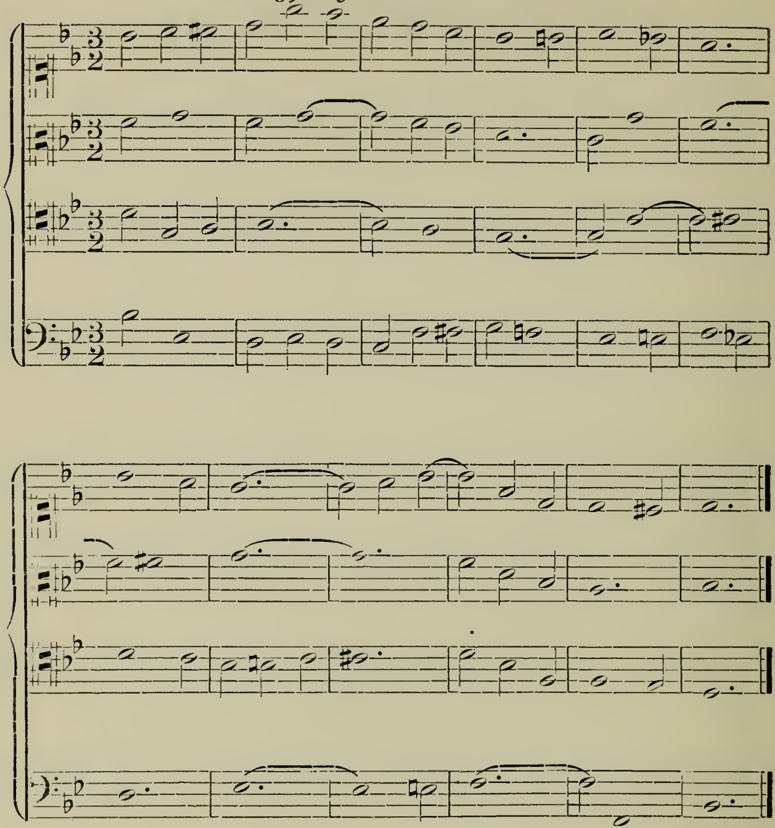


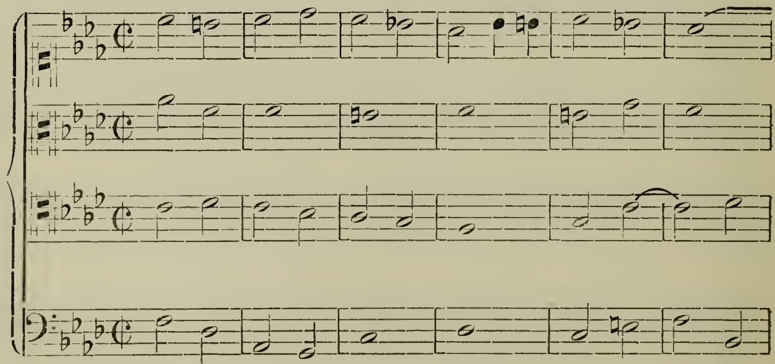


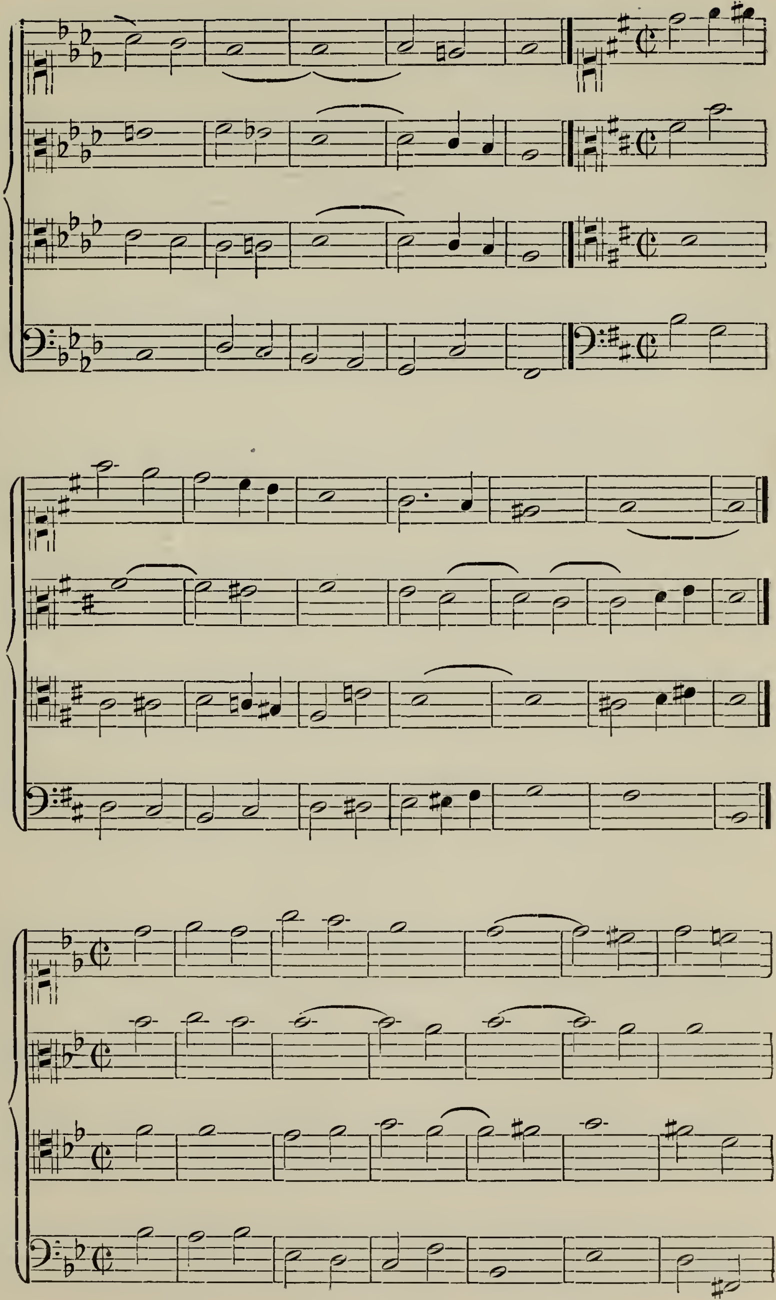
To Exercises No. 225, § 50.

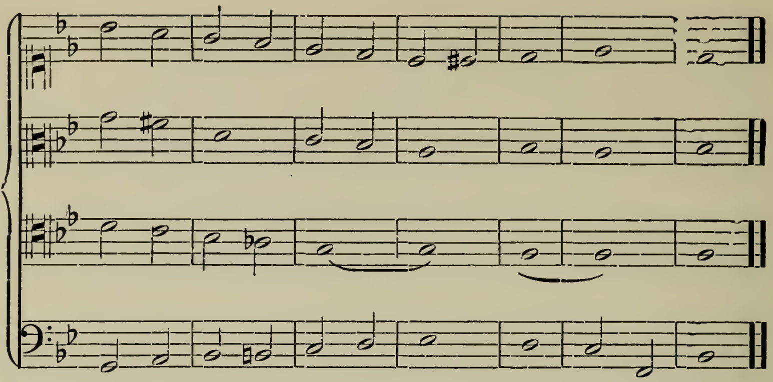


To Exercises No. 239, § 51.

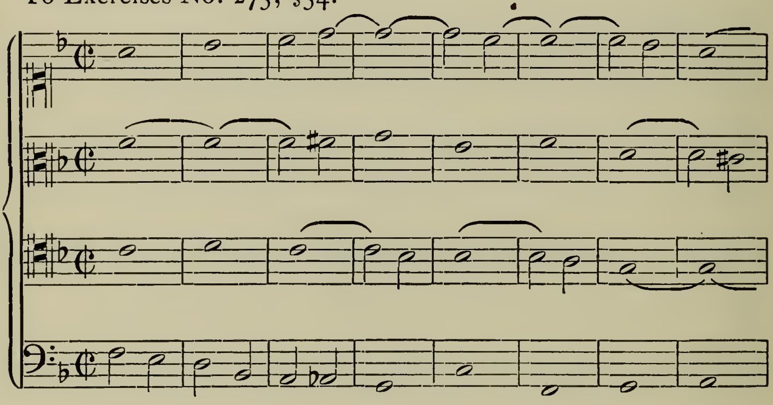


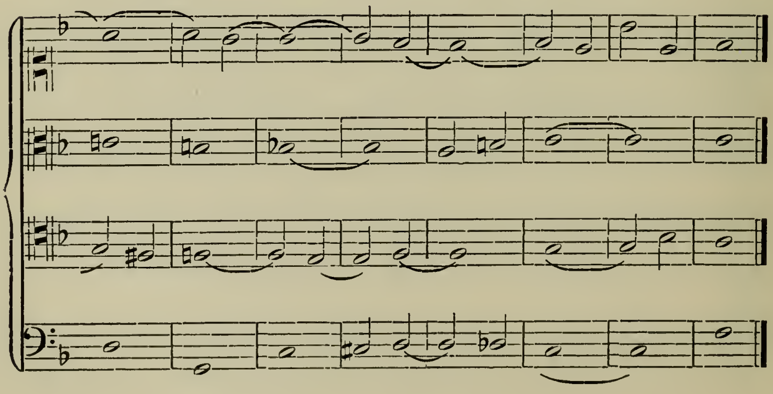


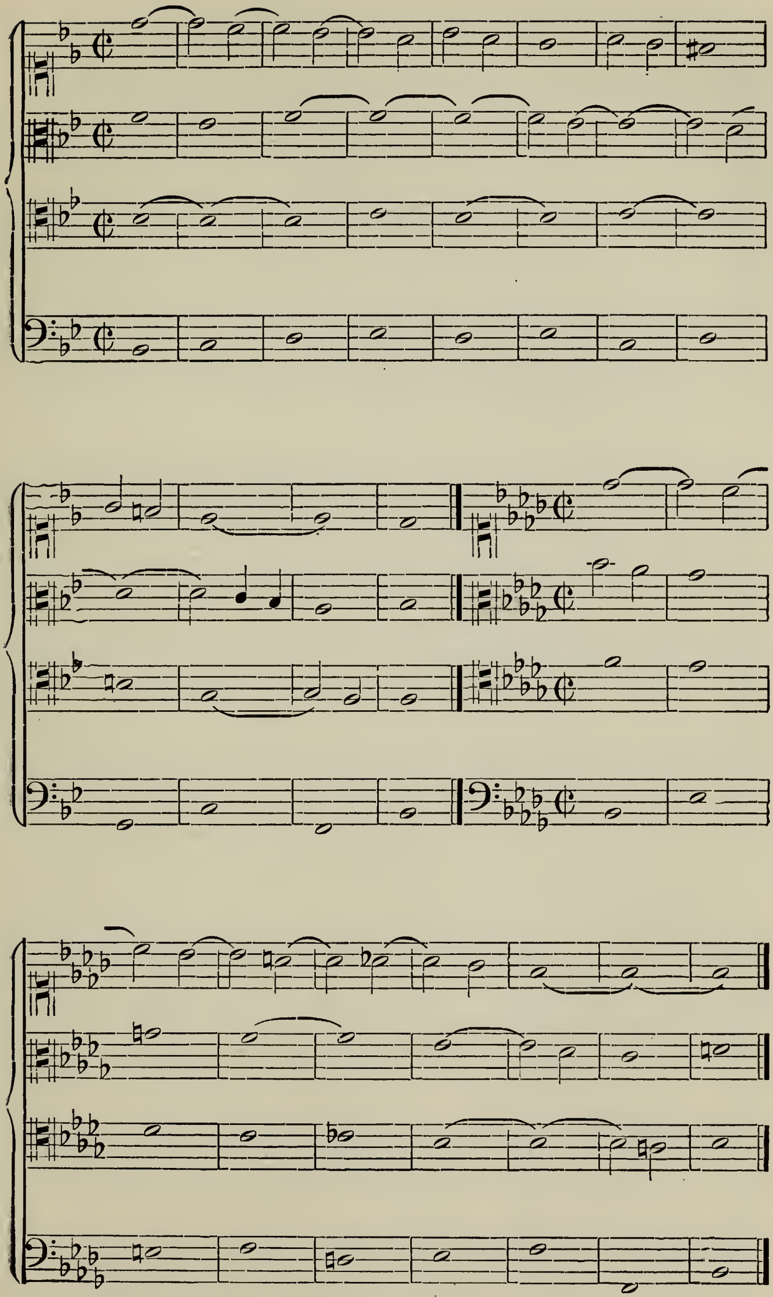


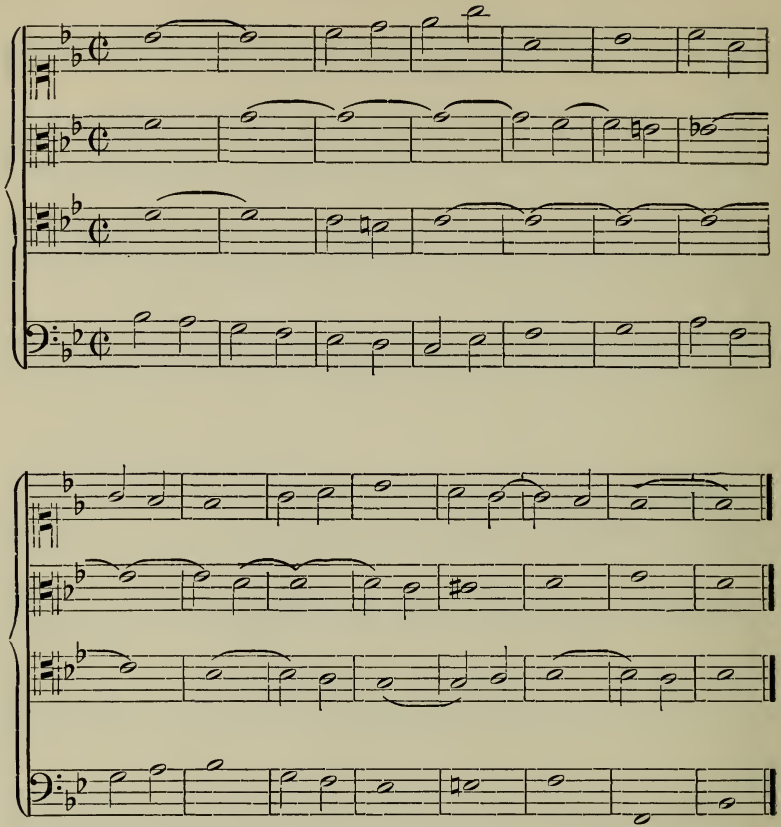


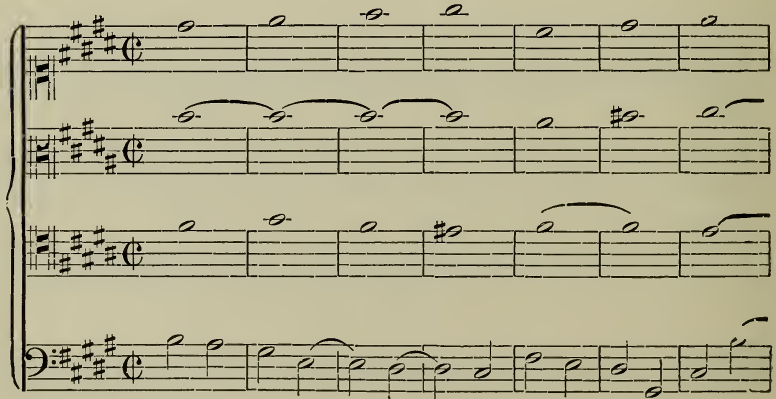
To Exercises No. 275, §54.

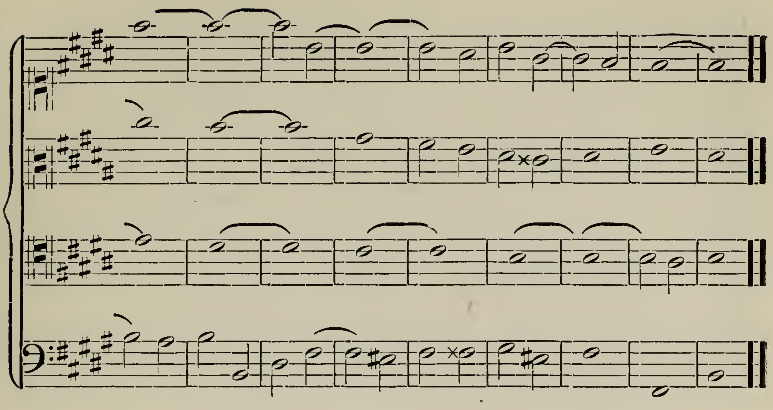




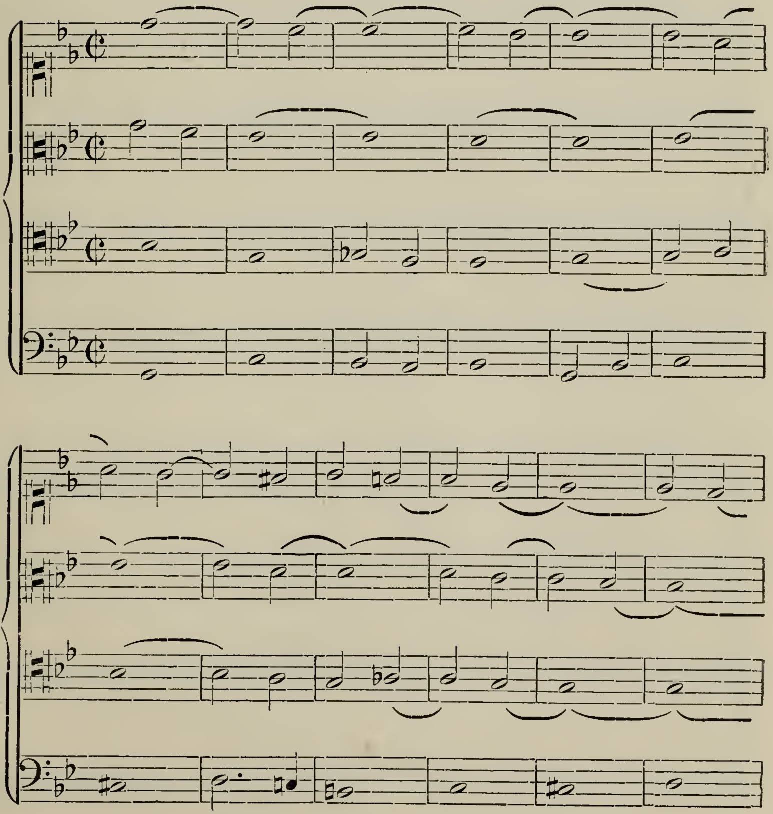


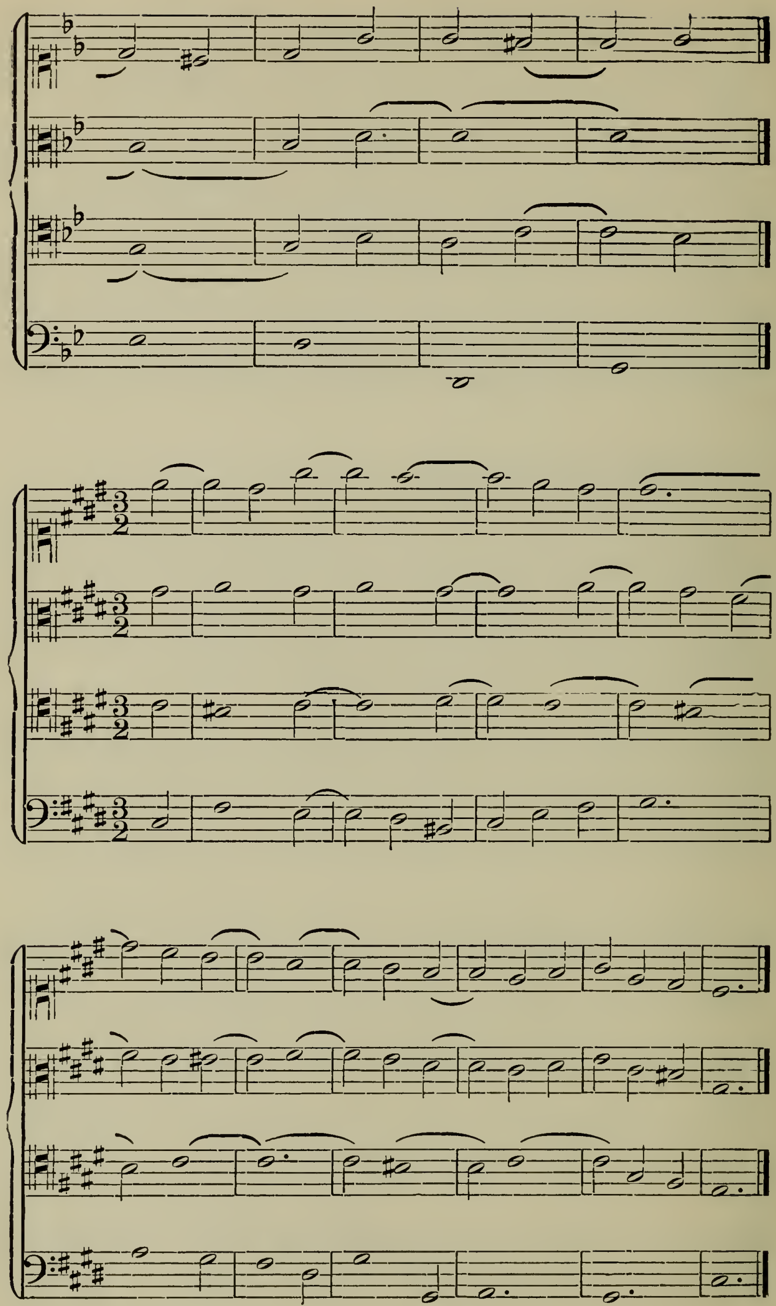




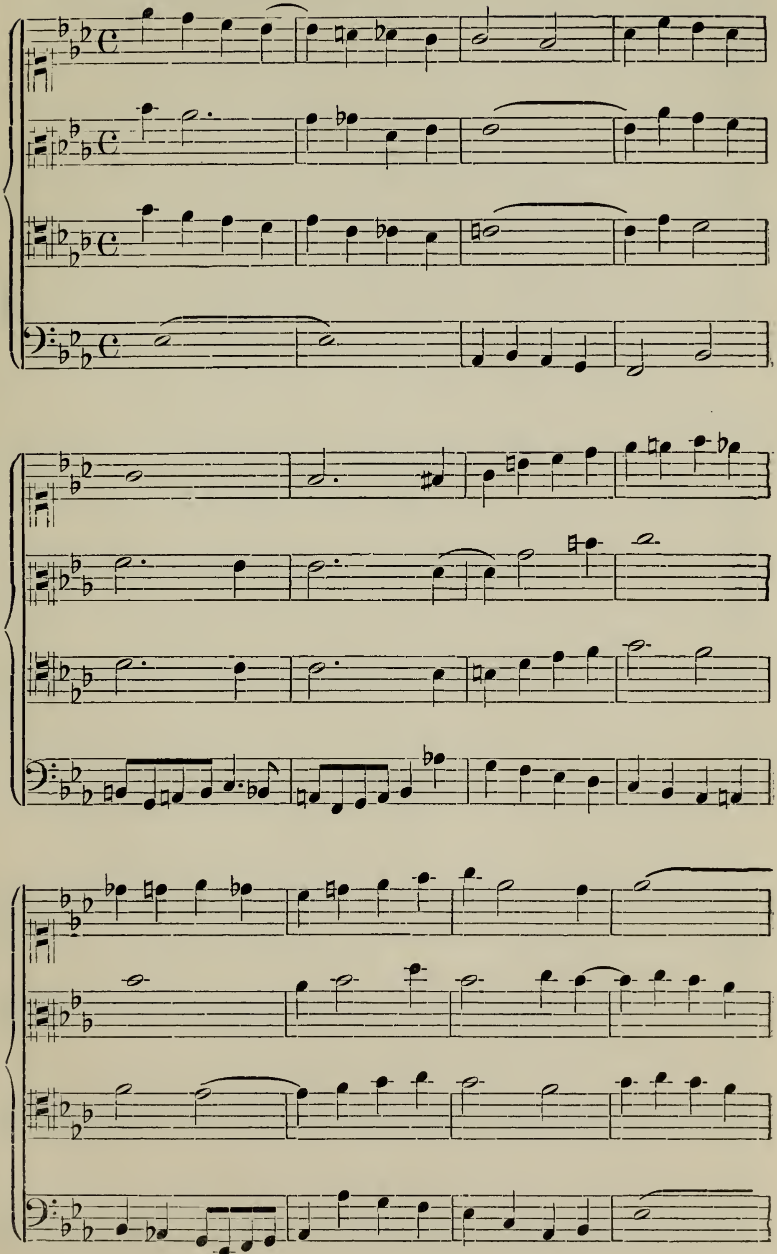


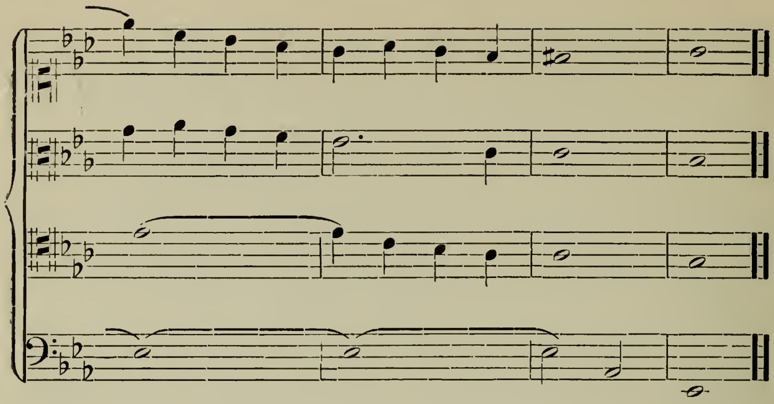
To Exercises No. 294, §56.



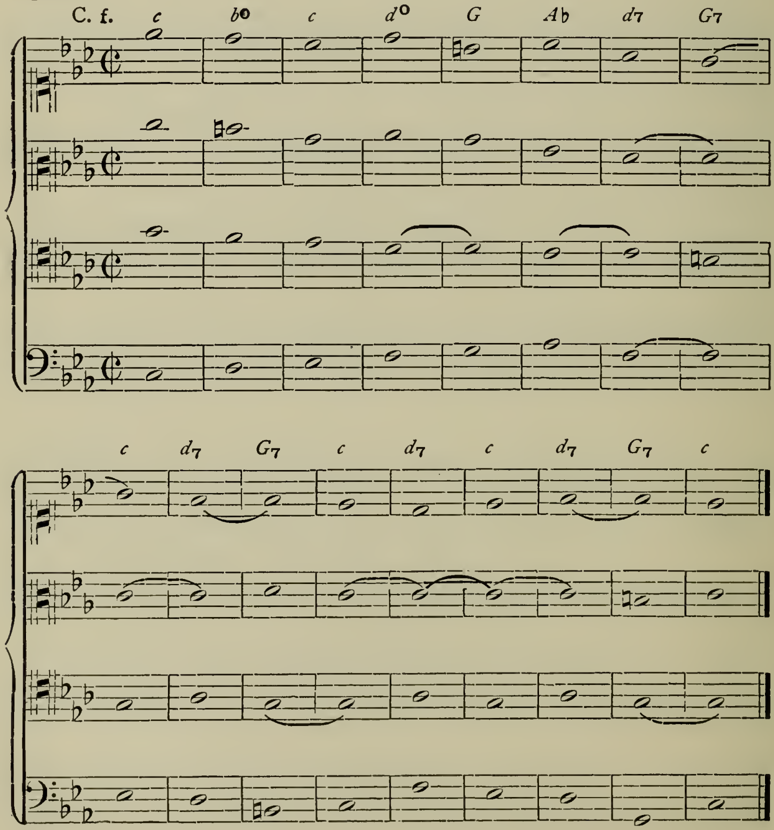


To Exercises No. 309, §58.

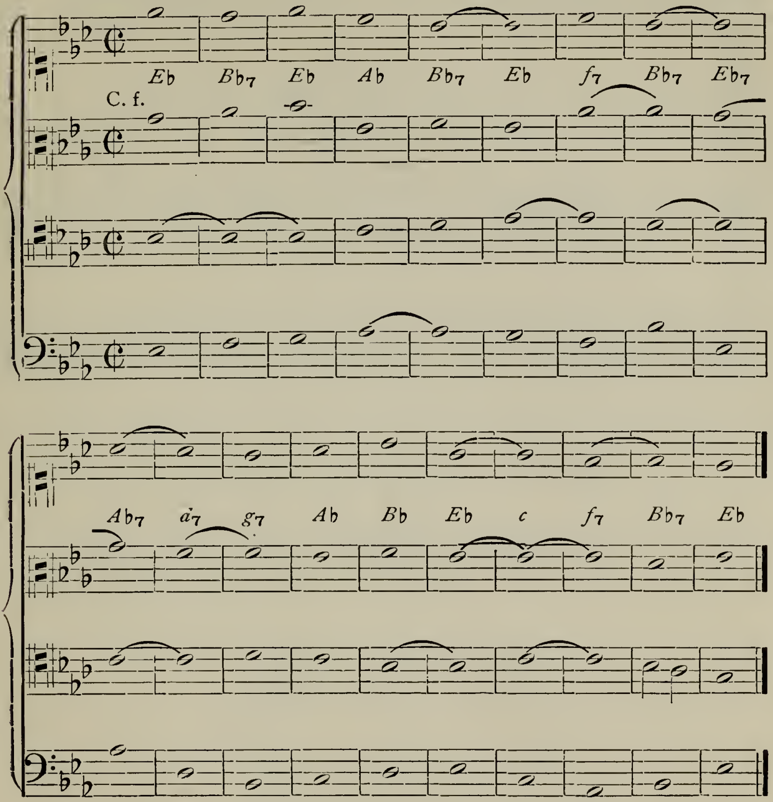




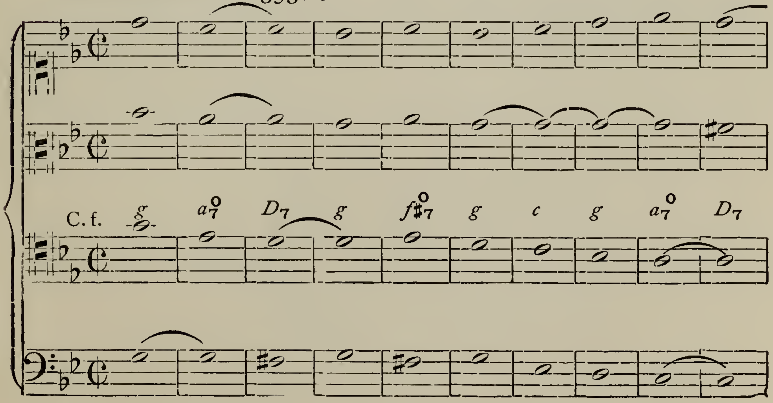
To Exercises No. 349, §61. The cantus firmus in the Soprano.

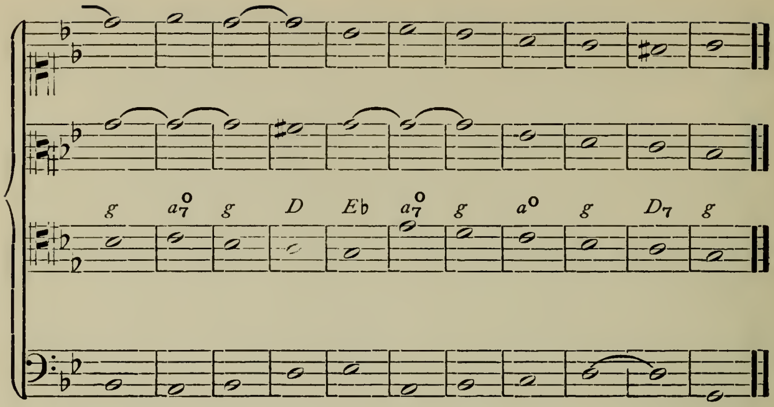


To Exercises No. 352, § 62. The Cantus firmus in the Alto.



To Exercises No. 353, § 62. The Cantus firmus in the Tenor.




g
a_7^0
g
D
E♭
a_7^0
g
a^0
g
D_7
g

◆

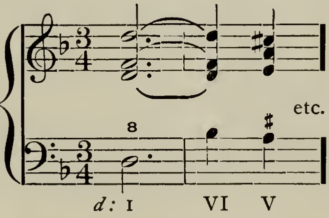
APPENDIX II.

Suggestions for Working out the Exercises in the Manual of Harmony, with Special Reference to Self-Instruction.

Repeated inquiries from persons studying without a teacher concerning the most difficult exercises in this book, occasioned me to write out the following suggestions; they contain such explanations and hints as I am in the habit of giving my pupils in harmony at the Royal Conservatory. These suggestions will tend to facilitate the teacher's task, and prove a welcome aid to the student.

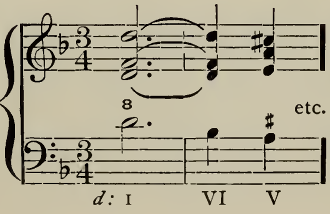
To §31, page 43. In four-part composition the triad may also be written without a fifth, as previously shown in Ex. 67, meas. 5. Ex. 92 might therefore begin as follows:

92.



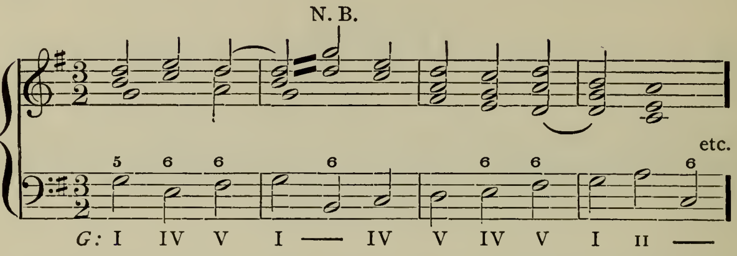
Indeed, a correct leading of the parts often renders this necessary (comp. Ex. 67, meas. 5); Ex. 92 could not contain the tonic triad with its fifth, if the bass were to begin on high *D*, and the octave of the root had to appear in the soprano.

92.



To §34, page 57. "Difficult Exercises", 118*b*. The second of these exercises (*h*) is to be begun as follows:

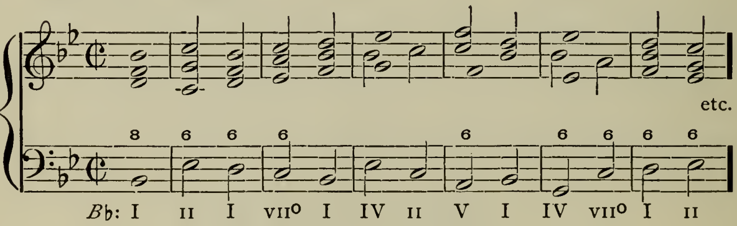
(*h*)



N. B. The skip of the soprano and alto in meas. 2 is within the same chord, and therefore allowable.

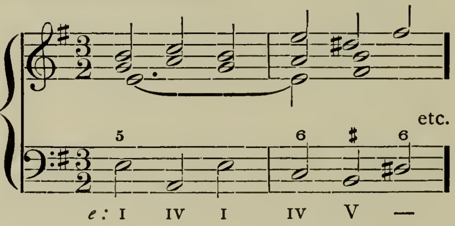
Exercise *i* begins:

(*i*)



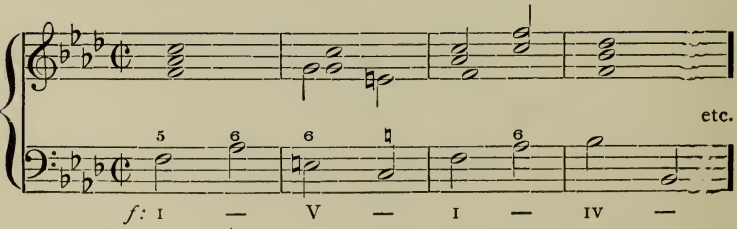
Exercise *m* commences thus:

(*m*)



The last Exercise (*q*) begins thus:

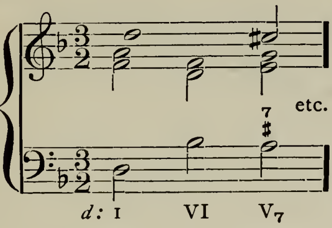
(*q*)



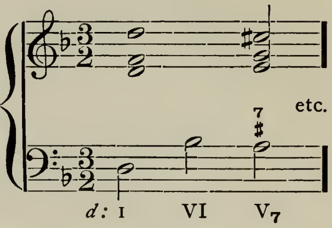
Always avoid doubling the third in the chord of the sixth when it is the leading-note.

To Exercises 137, §37, page 68. Exercise *f* may begin as follows:

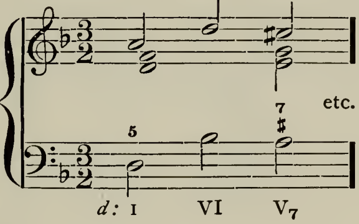
(*f*)



or:

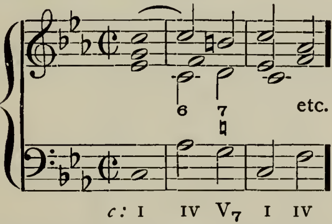


or thus:

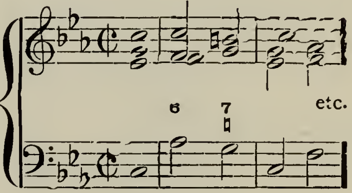


Exercise *h* may begin:

(*h*)

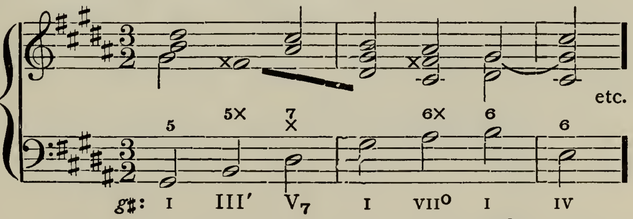


or:

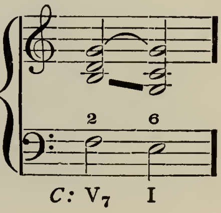


The last of these Exercises begins thus:

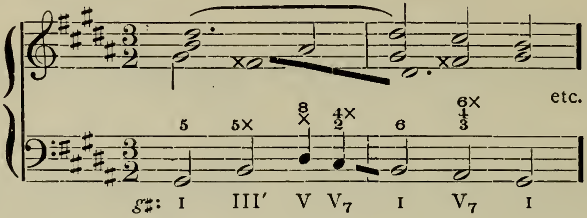
(*i*)



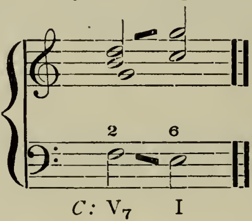
To §38, page 74, Ex. 142, meas. 6. (*f*)



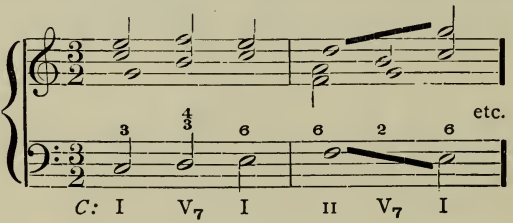
In this case the leading-note, when in an inner part, may also be led downwards, covered parallel fifths not arising therefrom. Exercise *k* on page 77 may therefore begin as follows:



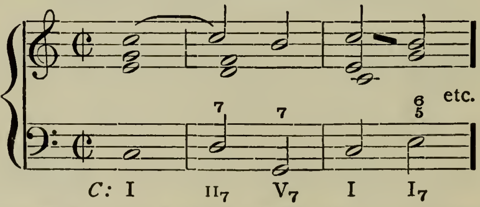
At the resolution of the chord of the second, the fifth of the dominant chord of the seventh may also skip a fourth upwards, e.g.



The first exercise at 145 (*a*) may therefore begin thus:

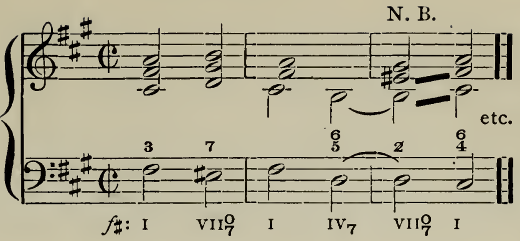


To Exercises 170, §41, page 89. In the case of all triads, the seventh can enter after the octave of the root without further preparation; Exercise *a* may therefore begin thus:

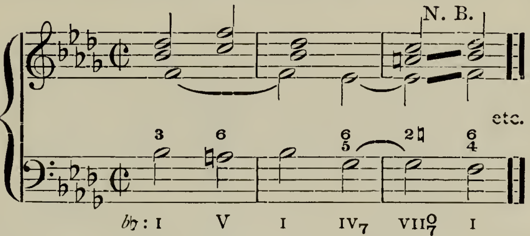


To Exercises No. 185, §43, page 96. In Exercises *e* and *f*, at the places marked N. B., the fifth of the diminished chord of the seventh may progress upwards, because, being set below the root, it forms a fourth with this latter.

(*e*)

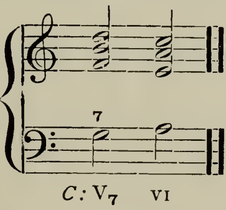


(*f*)

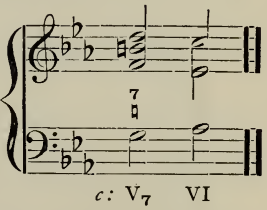


To §44, Ex. 187, page 100. From Ex. 187 the pupil will see, that the dominant chord of the seventh in the fundamental position must always be given witn all four intervals in four-part writing, when it is to be resolved to the triad on the 6th degree. In progressions between these two chords in minor, the third of the triad on the 6th degree must then always be doubled.

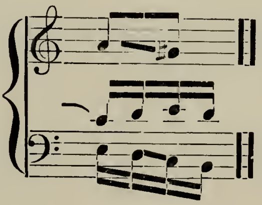
In Major:



In Minor:

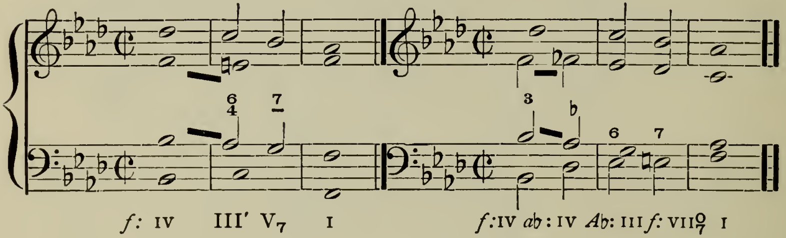


To §46, Ex. 203, page 112. Mozart, however, writes such parallel fifths, in meas. 8 of the fugue in the *C*-major Fantasia, even in three-part composition, which, as regards such forbidden progressions, requires still greater caution than four-part composition. Compare this passage in the above work:

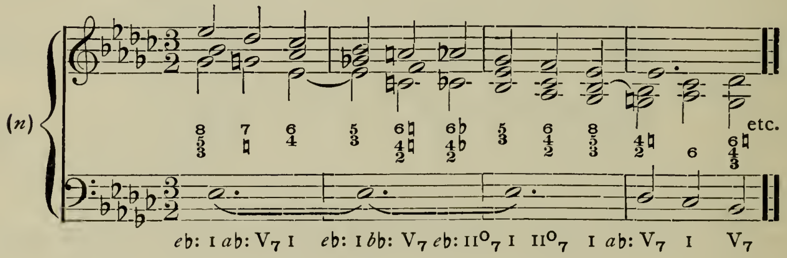


in which case the effect of the parallel fifths between the soprano and bass is, *by way of exception*, an admirable one.

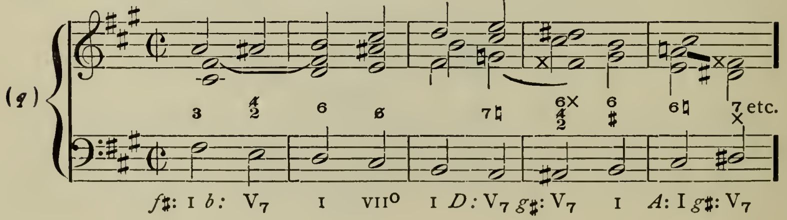
Hence it is sufficiently evident that parallel fifths, like those exhibited in Ex. 201 and 202, may be sanctioned at any time. Here we must take into consideration that the augmented fifth is a wider interval than the minor sixth. Either interval may follow the perfect fifth in downward progression, as may be seen from the examples below.



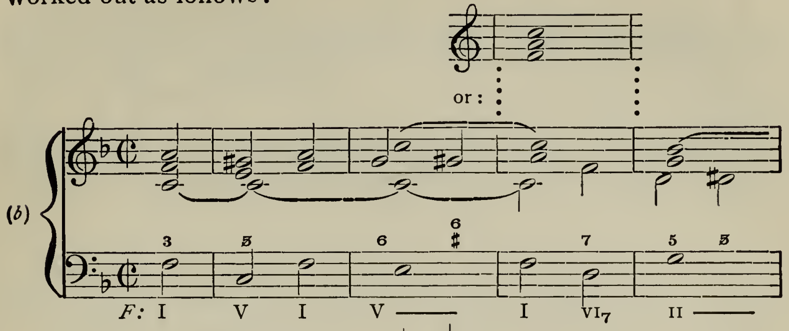
To Exercises No. 207, §47, page 115. Exercise *n* may begin as follows:


(*n*)
8 5 3
7 ♮
6 4
5 3
6♮ 4♮ 2
6♭ 4♭ 2
5 3
6 4 2
8 5 3
4♮ 2
6
6♮ 4 3
etc.
e♭: I *a♭:* V₇ I *e♭:* I *b♭:* V₇ *e♭:* II°₇ I II°₇ I *a♭:* V₇ I V₇

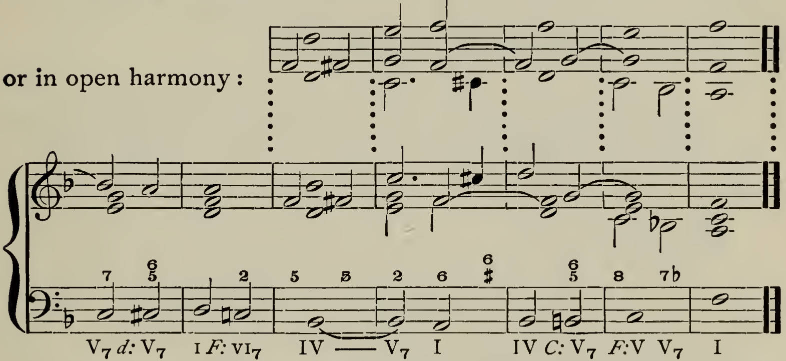
Exercise *q* may begin as follows:



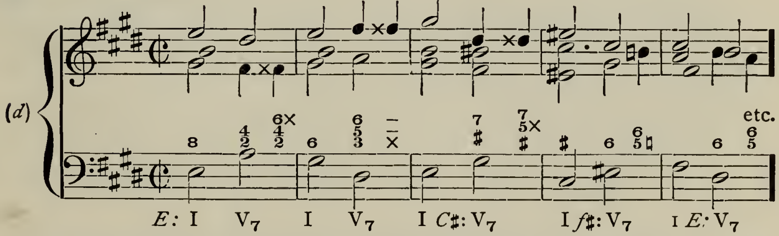
To Exercises No. 217, §48, page 121. Exercise *b* may be worked out as follows:



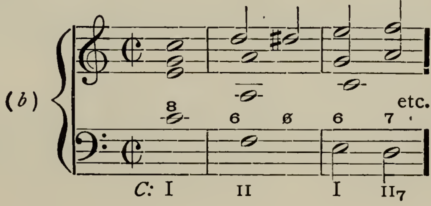
or in open harmony:



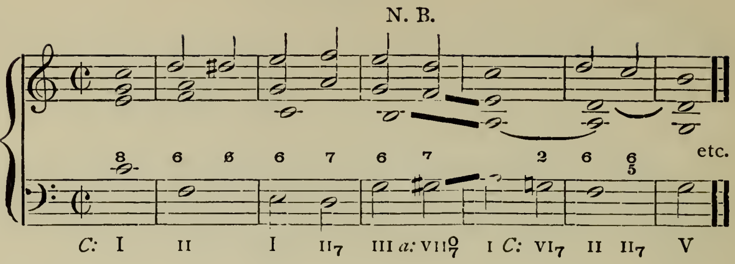
To Exercises No. 222, §49, page 127. Exercise *d* may begin as follows:



To Exercises No. 225, §50, page 130. Exercise *b* may commence thus:



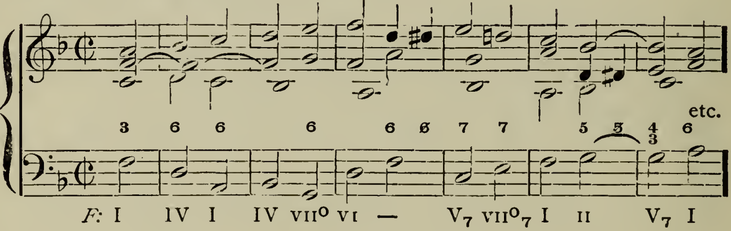
or:



N. B. By the contrary motion of the bass the effect of the parallel fifths in the inner parts is covered up, so that this progression can *not* be considered wrong here.

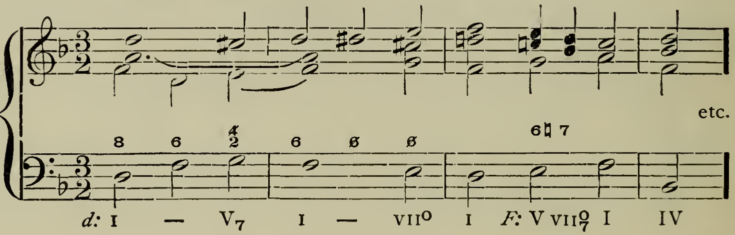
Exercise *c* may begin as follows:

(*c*)



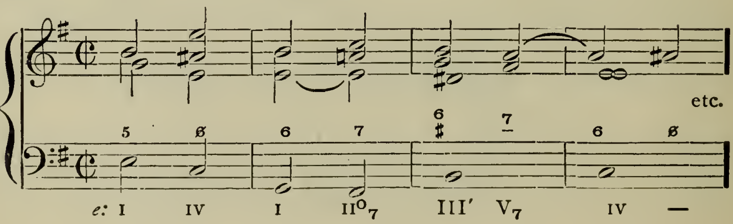
Exercise *d* may commence thus:

(*d*)

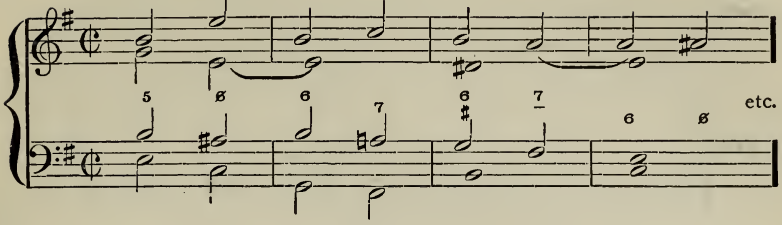


Exercise *g* may begin as follows:

(*g*)

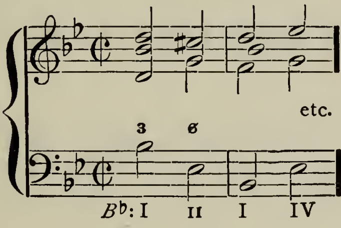


or in open harmony:

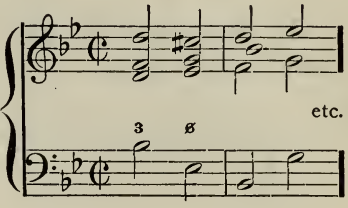


Exercise *h* may begin as follows:

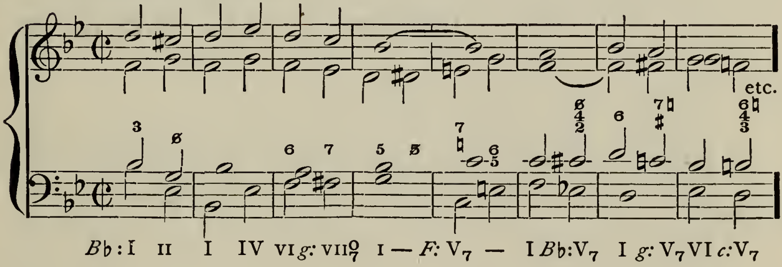
(*h*)



or:

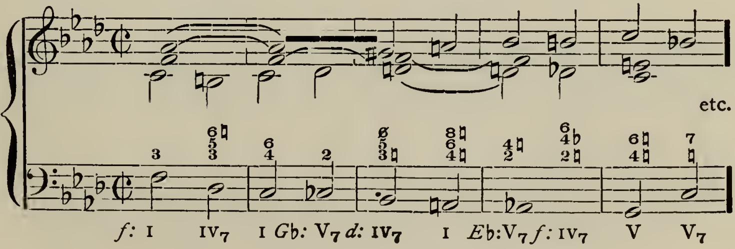


or in open harmony:

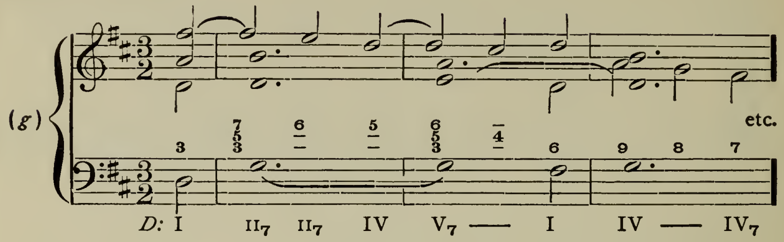

etc.
B♭: I ii I IV vi g: vii°7 i — F: V7 — I B♭: V7 I g: V7 VI c: V7

To Exercises No. 239, §51, page 138. Exercise *h* should begin:

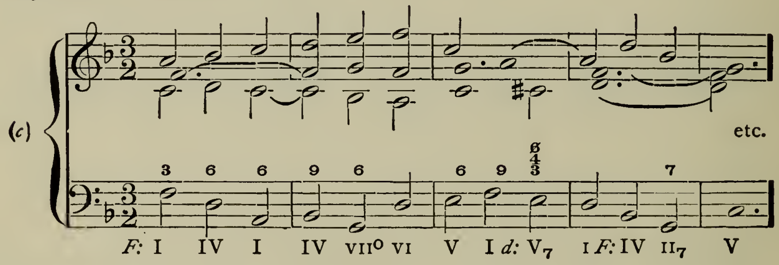
(*h*)



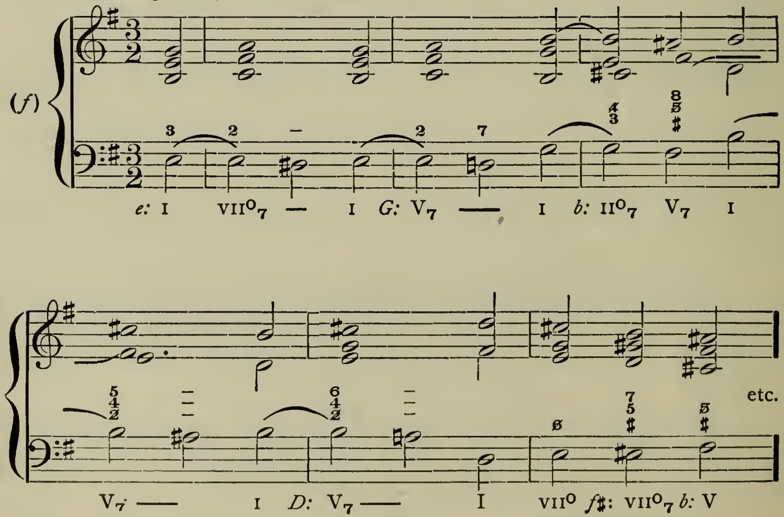
To Exercises No. 275, §54, page 160. Exercise *g* should begin as follows:



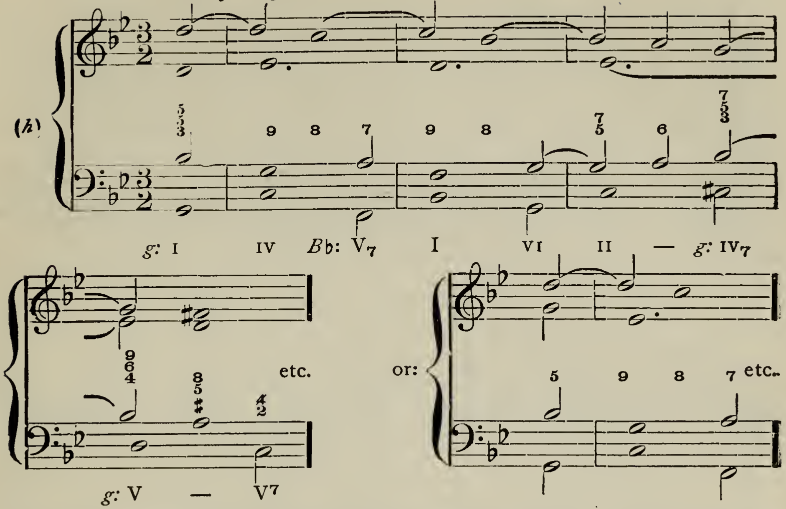
To Exercises No. 294, §56, pages 173-175. Exercise *c* may begin as follows:



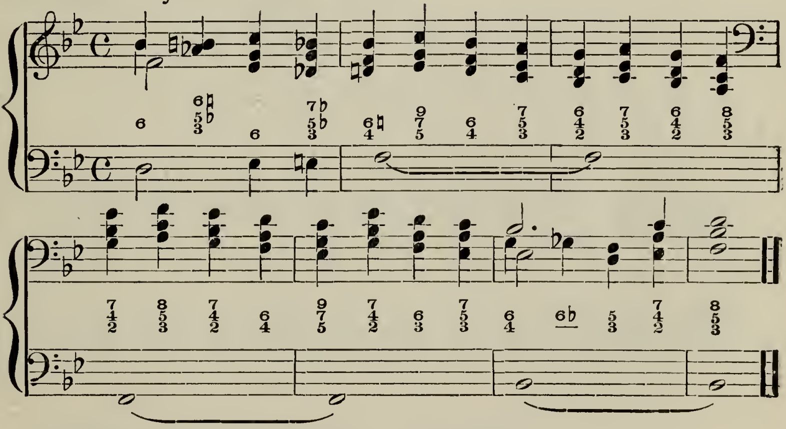
Exercise *f* may begin as follows:


(f)
3 2 — 2 7 4 3 8 5 ♯
e: I VII07 — I G: V7 — I b: II07 V7 I
5 4 2 — 6 4 2 — 6 7 5 ♯ 5 ♯
etc.
V7 — I D: V7 — I VII0 f♯: VII07 b: V

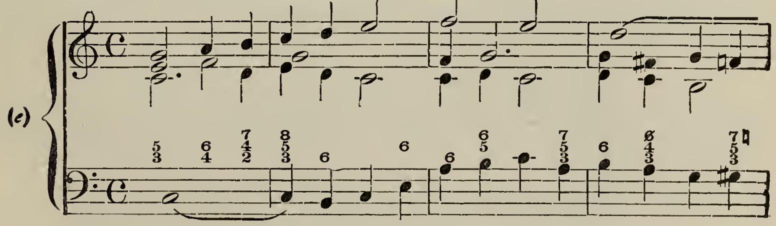
Exercise *h* may begin :

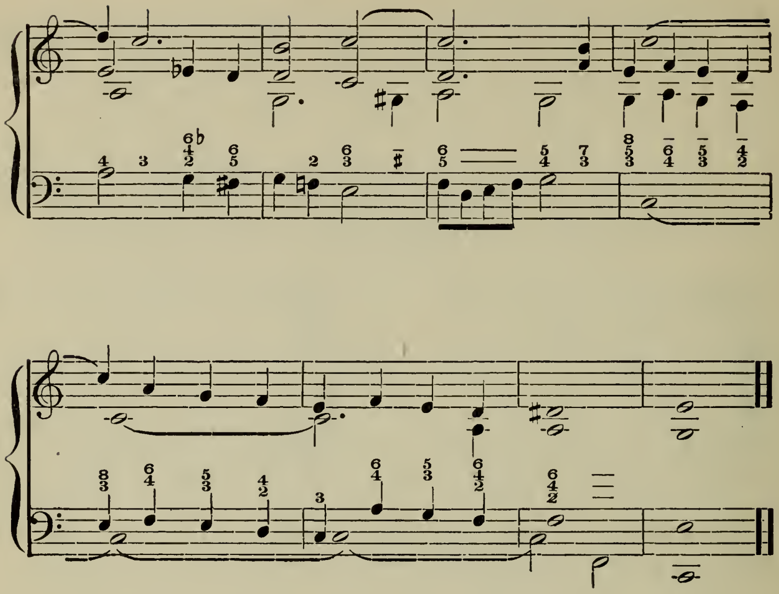


To Exercises No. 309, §58, page 181. The close of Exercise *b* may be worked out thus:

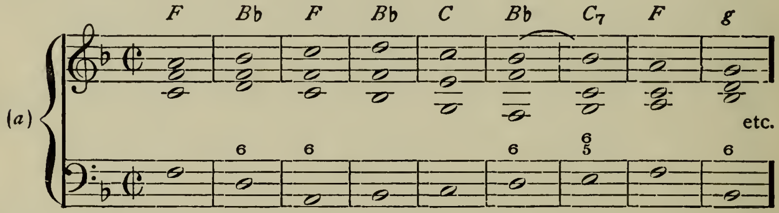


Exercise *e* may be worked out as follows :

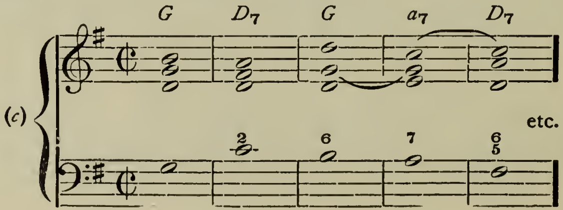




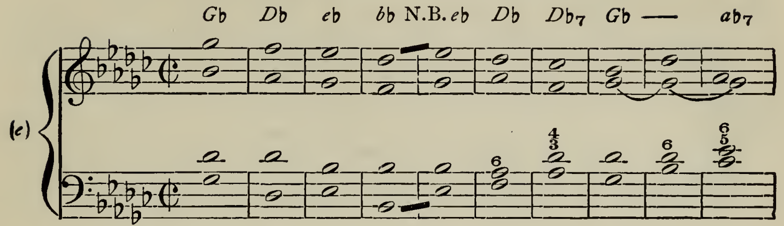
To Exercises No. 349, §61, pp. 204-205. Exercise *a* may begin as follows:



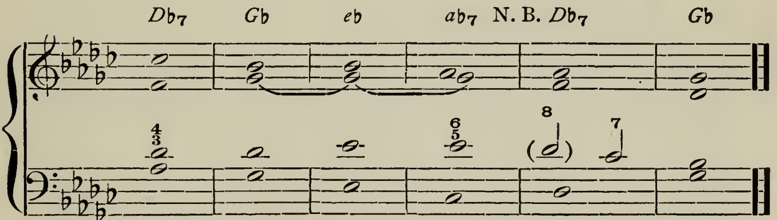
Exercise *c* may begin as follows:



Exercise *e* may be worked out as follows:

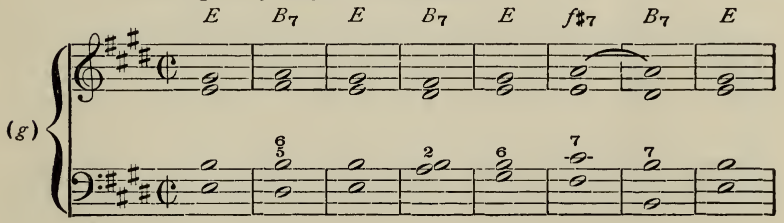


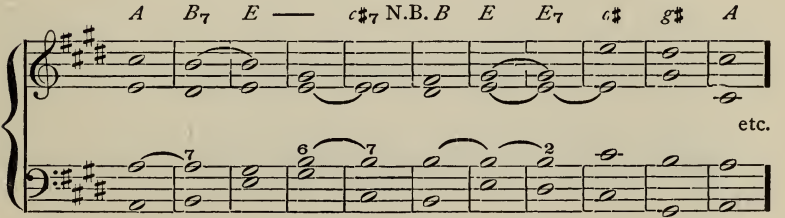
N. B. Comp. Ex. 59 *b* and Remark, on p. 26.



N. B. One may either let the octave precede the seventh, or let the latter enter unprepared by a skip in contrary motion to the bass.

Exercise *g* may begin as follows:

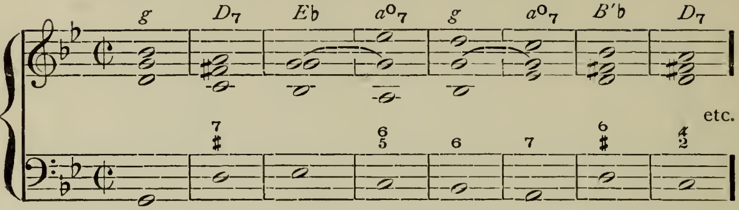




N. B. The Third in the chord of the seventh may be doubled, when it is not the leading-note. Comp. Remark on page 62.

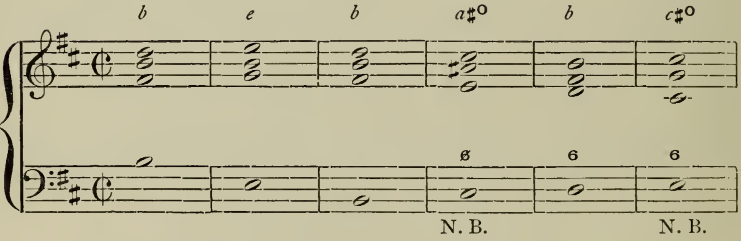
Exercise *i* may begin as follows:

(*i*)

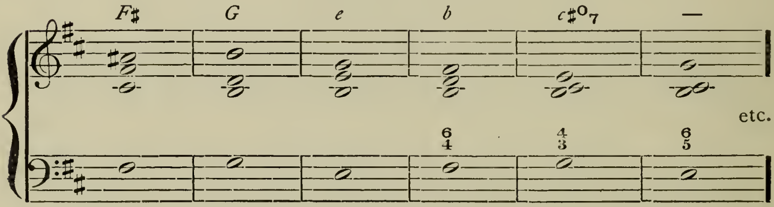


Exercise *l* may begin thus:

(*l*)

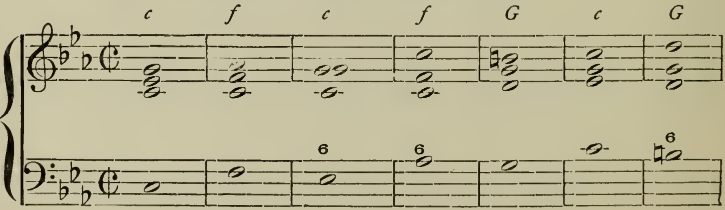


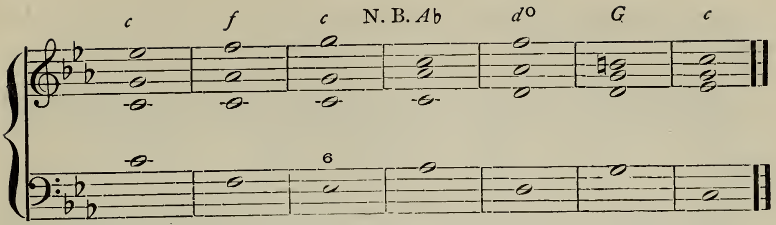
N. B. It is best to write diminished triads as chords of the sixth.



Exercise *m* might be worked out thus:

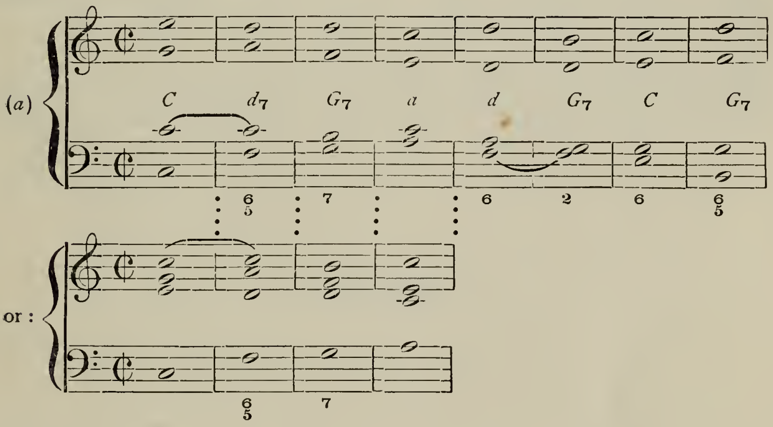
(*m*)

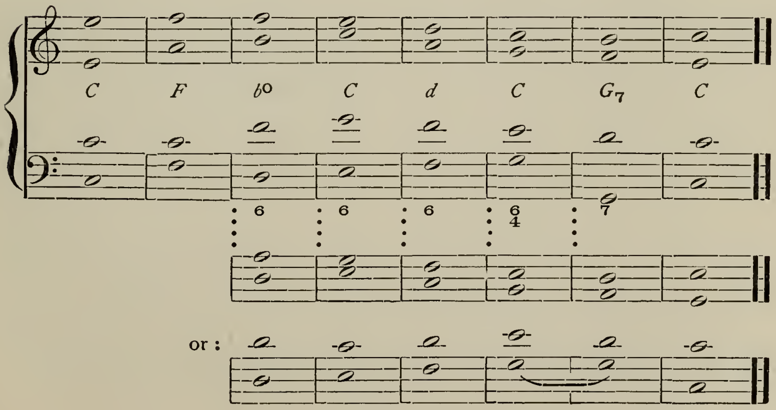




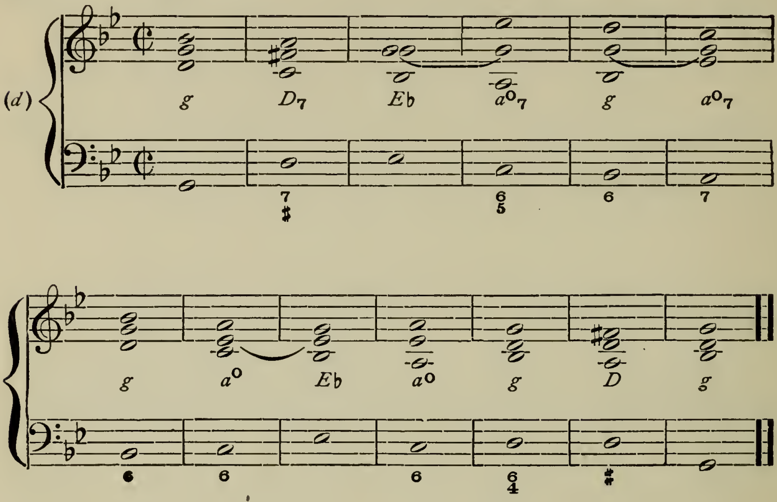
N. B. Triad without fifth.

To Exercises No. 352, §62, page 207. Exercise *a* may be worked out as follows:





To Exercises No. 353, §62, page 208. Exercise *d* may be worked out as follows:



◆

INDEX.

Accidental chord-forms, 94, 118, 160, 164.
Accomp. of chords to a cantus firmus, 194.
Altered chords, 142; in modulation, 222–232.
Alto, 14; as cantus firmus, 206; alto-clef, 126.
Appendix I, 247; II, 273.
Arsis (= strong beat), 221.
Auftakt (fractional measure beginning a movement), literally "up-beat," 243.
Augmented chord of the sixth, 129; of the third, fourth and sixth, 128, 133; of the third, fifth and sixth, 128, 133.
Authentic cadence, 23.

Bass, 14, 15; leading of, 199.

Cadence, authentic, 23; plagal, 23; deceptive, 98; perfect, 66; closing, varieties of, 221.
Cadence-like progression, 86–9.
C-clef, 125.
Cantus firmus, 194, 206–8.
Changing-notes, 178.
Chords, altered, 118.
" classification of, 12.
" independent and dependent, 12.
" passing, 177.
" view of, 140.
" also comp. Triads, Chords of the seventh.
Chord of the augm. sixth, 129.
" of the dimin. seventh, 93.
" of the fourth and sixth, 46–56.
" of the seventh, 59; inversions of, 70.
" of the sixth, 46.
Chromatic alteration, 118; *semitone*, 4.
Circle of fifths, 6.
Clefs, View of, 126.
Close, *Closing cadence*, 22, 66, 221.
Compass of voices, 14–15.
Covered fifths, 67, 182; *octaves*, 26, 103, 182–192; *unisons*, 191.
Consecutives, see Parallel fifths, octaves.
Consonances, perfect and imperfect, 9.
Contrary motion, 18, 54.
Counterpoint, 14.
Cross-relation, 193.

Deceptive cadence, 98.
Degrees, 2.
Derivative tones, 1.
Diatonic scale, 1; *semitone*, 4.
Diminished triad, 25.
" chord of the seventh, 93; in modulation, 216.
Dissonances, 9.
Dominant, 13; dom. triad, 14; dom. chord of the seventh, 59; in modulation, 210.
Doubling of tones, 15, 51, 58, 62; of the third in the chord of the sixth, 47, 58; of the seventh, 62; of root, in chord of the seventh, 62; of leading-note, 58, 80.

Dropping of intervals, 62 – 3, 87.

Eleventh, 2; chord of the, 172.
Enharmonic change, 215, 224.
Enharmonico-chromatic scale, 8.
Exercises for practice (fund. triads in major), 24; (all triads in major), 33; (triads in minor), 43; (inversions of triads), 56, 57; (dominant chord of seventh), 68 – 70; (inversions of), 76; (secondary chords of seventh in major), 86; (inversions of), 89; (interconnection of chords of seventh in major), 89; (secondary chords of seventh in minor, and inversions), 96; (non-cadenced progr. of dom. chord of the seventh), 106 – 8; (progressions of secondary chords of seventh with chords of other degrees and keys), 115 – 117; (triads with altered fifth), 121 – 2; (chords of seventh with altered fifth), 127 – 8; (augmented chord of the sixth), 130; (augm. chord of the fifth and sixth, and third, fourth and sixth), 138; (simple suspension), 160 – 3; (suspension in several parts), 173 – 5; (passing-chords, organ-point), 181 – 2; (accomp. of a *cantus firmus* in soprano), 204 – 5; (in the alto or tenor), 207 – 8.

False or *inharmonic* relation, 193.
Figuring of chords, 43.
Fifth, 2; perfect, augm., dimin., 5; omitted in chord of the seventh, 62, 87; altered (in the triad), 118; (in chord of the seventh), 122.
Fifth and sixth, chord of the, 71; augm. chord of the, 128, 133.
Fifths, open or parallel, 17, 135; covered, 67; in contrary motion, 203; succession of perfect and dimin. fifths, 30, 31, 69; of perfect and augm., 111; Circle of fifths, 6.
Form, 240.
Four-part writing, 14 – 16, 194 – 8.
Fourth, perfect, 2; augm. and dimin., 5; preparation of, in chord of the fourth and sixth, 199.
Fourth and sixth, chord of the, 46 – 56; employment in cadence, 199, 215, 222; as passing-chord on weak beat, 199; augm. chord of the, 120.
Fundamental, see Root.
" *chords*, 140; *triads* (in major), 13; in (minor), 38.

Half-step, see Semitone.
Harmony, study of, see Preface.
" *close* and *open*, 21, 124.

Inner parts, 15, 49.
Interconnection of chords, 17, 86, 98, 101, 108, etc.
Interval between parts, 194 – 8.
Intervals, perfect, 2; major, 2; minor, augm., dimin., 5; View of all, 7; inversion of, 9; omission of, 62 – 3, 87.
Inversion of chords of the seventh, 70, 90; of intervals, above and below, 10; of triads, 45.

Leading-note, *leading-tone*, 28, 49; in the inner parts, 65; doubling of, 29, 58.
Leading of parts, 14, 198, 201; of bass, 199, 201; of soprano, 195, 206; of inner parts, 195, 201.

Melody of soprano, 195, 206.
Middle parts, see Inner parts.
Modulation, 99, 208.
Motion, parallel, oblique, contrary, 18.
Musical hearing, 234.

Natural tones, 1.
Ninth, 2; major and minor, 5; chord of, 270 – 2; suspension of, 156, 170.

Octave, perfect, dimin., 5, 8.
Octaves, open or parallel, 17; covered, 26, 103, 182 – 192; in contrary motion, 204.

Omission of intervals, 62 – 3, 87.
Organ-point, 170, 179.
Outer parts, 15.

Parallel fifths, 17, 135, 203; neutralized by contrary motion, 203; by suspension, 155; *octaves*, 17, 103; in suspension, 155.
Passing-notes, 175; *passing-chords*, 177.
Pedal, *Pedal-point*, 170, 179.
Perfect cadence, 66.
Plagal close or *cadence*, 23.
Position, close or open, see Harmony.
Preparation of the seventh, 83 – 5, 87, 173; of the suspension, 147, 150.
Prime, perfect, 2; augm., 2, 5.
Primary triads, see Fundamental triads.
Principal chord of the seventh, 59.
Progression of parts, see Leading.
Progressions, forbidden, 17, 26, 65, 69, 103, 108, 114, 182 – 192; of seventh by skips, 104, 139; in unison, 191.

Resolution, of dom. chord of the seventh, 59, 66; of secondary chords of the seventh (in major), 72 – 86; (in minor), 90; of augm. chord of the sixth, 129; of augm. chord of the third, fifth and sixth, and third, fourth and sixth, 134; of suspensions, 147, 151 – 2, 153 – 4.
Root, 3; doubled in chord of the seventh, 62.

Scale, major, 1; minor (harmonic and melodic), 35.
Score, 16; short, 16.
Second, 2; major, minor, augm. 5; step of augm. second, 39.
  " chord of the, 71; freer resolution of, 104; with altered sixth, 123.
Secondary (or subordinate) triads, in major, 24; in minor, 38.
  " chords of the seventh, in major, 78; in minor, 90.
Semitone, greater and lesser, 4
Sequence, 33; sequence of suspensions, 152.
Seventh, 2; major, minor, dimin., 5; preparation of, 61, 83; doubled, 62; unprepared entrance of, 61; resolution by a step downwards, 61; by a step upwards, 102 – 4, 113; held or sustained, 101; skipping, 104, 139.
Seventh, chord of the, 59; dominant chord of the seventh, 59; on 7th degree in major, 78; on 7th degree in minor, 92, 93; this last chord in modulation, 216; interconnection of chords of the seventh, 86; with chords of other degrees and keys, 108; non-cadenced progressions, 98; View of all, 141.
Sixth, 2; major, minor, augm., 5.
  " chord of the, 46; augm. (altered) chord of the, 129; the latter in modulation, 218.
Soprano, 14; soprano-clef, 126.
  " part, melodic leading of, 195, 206.
Steps and skips, 201.
Subdominant, 13.
Subordinate (or secondary) triads, in major, 24; in minor, 38.
  " chords of the seventh, in major, 78; in minor, 90.
Subject-matter and Form, 240.
Suspension, 144; in bass, 153; in several parts, 164; upward resolution of, 164; of the ninth, 156; employment in modulation, 220.
Sustained or *held* part, 152, 179 – 181.

Tenor, 14; tenor-clef, 126.
Tenth, 2.
Thesis (= weak beat), 221.
Third, 2; major, minor, dimin., 5; in chord of the sixth, 47; in chord of the seventh, 61; as leading-tone, 28 – 9.
Third, fourth and sixth, chord of the, 71.
Thirteenth, chord of the, 12, 172.
Thorough-bass notation, 43.

Tonic, 13; see Triad.
Transition, see Modulation.
Treble, 14; treble-clef, 16.
Triad, 12; major and minor, 13; dominant triad (in major), 13; (in minor), 37, tonic triad, 13; in modulation, 209 – 212; subdominant triad, 13; diminished, 25; augmented, 38; altered, 118.
Triads of the major and minor scales, 45; fundamental, 13; their inter-relation, 14; subordinate triads, 24, 38; View of all triads, 140.
Tritone, 80.
Twelfth, 2.

Unison, 4; progression in, 18, 191.

View of the chords, 140; of the clefs, 126; of the intervals, 9 – 11.
Violin-clef, 16.
Vocal chorus, 14 – 16; interval between parts in, 194 – 8.
Voices, classification and compass of, 14 – 15; leading of, 14, 195, 199, 206.

Whole tone, 2.

◆

DATE DUE

SEP 18 REC'D
SEP 1 1979
JAN 24 [illegible]

DEMCO 38-297

3 1197 00359 3644

~~761.3~~
~~J141m~~

McCUNE SCHOOL OF MUSIC & ART